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<212> PRT

<213> Homo sapiens

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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5546

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<212> DNA

<213> Homo sapiens

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<210> 5548

<211> 167

<212> PRT

<213> Homo sapiens

<400> 5548

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 35 40 45
 Phe Val Ile Pro Lys Lys Asn Val Pro Thr Ser Lys Arg Glu Thr Tyr
 50 55 60
 Thr Glu Asp Phe Ile Lys Lys Gln Ile Glu Glu Phe Asn Ile Gly Lys
 65 70 75 80
 Arg His Leu Ala Asn Met Met Gly Glu Asp Pro Glu Thr Phe Thr Gln
 85 90 95
 Glu Asp Ile Asp Arg Ala Ile Ala Tyr Leu Phe Pro Ser Gly Leu Phe
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 Glu Lys Arg Ala Arg Pro Val Met Lys His Pro Glu Gln Ile Phe Pro
 115 120 125
 Arg Gln Arg Ala Ile Gln Trp Gly Glu Asp Gly Arg Pro Phe His Tyr

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<211> 1865

<212> DNA

<213> Homo sapiens

<400> 5549

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<211> 242

<212> PRT

<213> Homo sapiens

<400> 5550

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<210> 5551

<211> 1689

<212> DNA

<213> Homo sapiens

<400> 5551

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<210> 5552

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5552

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		20						25					30		
Tyr	Leu	Leu	Asp	Pro	Tyr	Val	Asn	Leu	Ala	Pro	Gly	Cys	Arg	Ser	Leu
		35					40					45			
Phe	Ser	Val	Ile	Val	Arg	Val	Val	Gly	Asp	Leu	Met	Leu	Arg	Ile	Gln
	50				55					60					
Arg	Ile	Gln	Asp	Phe	Thr	Pro	Lys	Leu	Leu	Leu	Val	Arg	Lys	Arg	Leu
65					70					75				80	
Leu	Gly	Leu	Glu	Pro	Glu	Gly	Pro	Ile	Ser	Asp	Leu	Glu	Pro	Val	Glu
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<211> 274

<212> DNA

<213> Homo sapiens

<400> 5553

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<212> PRT
<213> Homo sapiens

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Gly Pro Ala Thr Ala Pro Ala Val Val Leu Ser His Tyr Arg Gly Cys
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<211> 414
<212> DNA
<213> Homo sapiens

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<210> 5556
<211> 115
<212> PRT
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<211> 360

<212> PRT

<213> Homo sapiens

<400> 5558

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			20					25					30		
Ser	Val	Pro	Arg	Glu	Pro	Ile	Asp	Arg	Lys	Arg	Leu	Lys	Lys	Asp	Val
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Gln	Ser	Pro	Ser	Ala	Pro	Pro	Ala	Asp	Val	Thr	Pro	Lys	Pro	Ala	Thr
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Glu	Ala	Val	Gln	Ser	Glu	His	Ser	Asp	Ala	Ser	Pro	Met	Ser	Ile	Asn
			100					105					110		
Glu	Val	Ile	Leu	Ser	Ala	Ser	Gly	Ala	Cys	Lys	Leu	Ile	Asp	Ser	Leu
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	165	170	175		
Leu Asp Glu Leu Arg Arg Val Ser Val Pro Tyr	Pro Ser Ser Leu Leu				
	180	185	190		
Ser Pro Ser Arg Glu Pro Pro Lys Met Asn Pro Val Val Glu Pro Leu					
	195	200	205		
Ser Trp Met Leu Gly Thr Trp Leu Ser Asp Pro Pro Gly Ala Gly Thr					
	210	215	220		
Tyr Pro Thr Leu Gln Pro Phe Gln Tyr Leu Glu Val His Ile Ser					
225	230	235	240		
His Val Gly Gln Pro Met Leu Asn Phe Ser Phe Asn Ser Phe His Pro					
	245	250	255		
Asp Thr Arg Lys Pro Met His Arg Glu Cys Gly Phe Ile Arg Leu Lys					
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Pro Asp Thr Asn Lys Val Ala Phe Val Ser Ala Gln Asn Thr Gly Val					
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Val Glu Val Glu Glu Gly Glu Val Asn Gly Gln Glu Leu Cys Ile Ala					
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Ser His Ser Ile Ala Arg Ile Ser Phe Ala Lys Glu Pro His Val Glu					
305	310	315	320		
Gln Ile Thr Arg Lys Phe Arg Leu Asn Ser Glu Gly Lys Leu Glu Gln					
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Thr Val Ser Met Ala Thr Thr Thr Gln Pro Met Thr Gln His Leu His					
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<210> 5559

<211> 3866

<212> DNA

<213> Homo sapiens

<400> 5559

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<211> 1165

<212> PRT

<213> Homo sapiens

<400> 5560

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 5563

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<212> DNA

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<400> 5563

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<210> 5564

<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

Met Ala Ala Ala Val Ala Ala Pro Leu Ala Ala Gly Gly Glu Glu Ala
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 Ala Ala Thr Thr Ser Val Pro Gly Ser Pro Gly Leu Pro Gly Arg Arg
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 Ser Ala Glu Arg Ala Leu Glu Glu Ala Val Ala Thr Gly Thr Leu Asn
 35 40 45
 Leu Ser Asn Arg Arg Leu Lys His Phe Pro Arg Gly Ala Ala Arg Ser
 50 55 60
 Tyr Asp Leu Ser Asp Ile Thr Gln Ala Asp Leu Ser Arg Asn Arg Phe
 65 70 75 80
 Pro Glu Val Pro Glu Ala Ala Cys Gln Leu Val Ser Leu Glu Gly Leu
 85 90 95
 Ser Leu Tyr His Asn Cys Leu Arg Cys Leu Asn Pro Ala Leu Gly Asn
 100 105 110
 Leu Thr Ala Leu Thr Tyr Leu Asn Leu Ser Arg Asn Gln Leu Ser Leu
 115 120 125
 Leu Pro Pro Tyr Ile Cys Gln Leu Pro Leu Arg Val Leu Ile Val Ser
 130 135 140
 Asn Asn Lys Leu Gly Ala Leu Pro Pro Asp Ile Gly Thr Leu Gly Ser
 145 150 155 160
 Leu Arg Gln Leu Asp Val Ser Ser Asn Glu Leu Gln Ser Leu Pro Ser
 165 170 175
 Glu Leu Cys Gly Leu Ser Ser Leu Arg Asp Leu Asn Val Arg Arg Asn
 180 185 190
 Gln Leu Ser Thr Leu Pro Glu Glu Leu Gly Asp Leu Pro Leu Val Arg
 195 200 205
 Leu Asp Phe Ser Cys Asn Arg Val Ser Arg Ile Pro Val Ser Phe Cys
 210 215 220
 Arg Leu Arg His Leu Gln Val Ile Leu Leu Asp Ser Asn Pro Leu Gln
 225 230 235 240
 Ser Pro Pro Ala Gln Val Cys Leu Lys Gly Lys Leu His Ile Phe Lys
 245 250 255
 Tyr Leu Ser Thr Glu Ala Gly Gln Arg Gly Ser Ala Leu Gly Asp Leu

260 265 270
 Ala Pro Ser Arg Pro Pro Ser Phe Ser Pro Cys Pro Ala Glu Asp Leu
 275 280 285
 Phe Pro Gly His Arg Tyr Asp Gly Gly Leu Asp Ser Gly Phe His Ser
 290 295 300
 Val Asp Ser Gly Ser Lys Arg Trp Ser Gly Asn Glu Ser Thr Asp Glu
 305 310 315 320
 Phe Ser Glu Leu Ser Phe Arg Ile Ser Glu Leu Ala Arg Glu Pro Arg
 325 330 335
 Gly Pro Arg Glu Arg Lys Glu Asp Gly Ser Ala Asp Gly Asp Pro Val
 340 345 350
 Gln Ile Asp Phe Ile Asp Ser His Val Pro Gly Glu Asp Glu Glu Arg
 355 360 365
 Gly Thr Val Glu Glu Gln Arg Pro Pro Glu Leu Ser Pro Gly Ala Gly
 370 375 380
 Asp Arg Glu Arg Ala Pro Ser Ser Arg Arg Glu Glu Pro Ala Gly Glu
 385 390 395 400
 Glu Arg Arg Arg Pro Asp Thr Leu Gln Leu Trp Gln Glu Arg Glu Arg
 405 410 415
 Arg Gln Gln Gln Gln Ser Gly Ala Trp Gly Ala Pro Arg Lys Asp Ser
 420 425 430
 Leu Leu Lys Pro Gly Leu Arg Ala Val Val Gly Gly Ala Ala Val
 435 440 445
 Ser Thr Gln Ala Met His Asn Gly Ser Pro Lys Ser Ser Ala Ser Gln
 450 455 460
 Ala Gly Gly Cys Ser Gly Ala Gly Ser Pro Ala Pro Ala Pro Ala Ser
 465 470 475 480
 Gln Glu Pro Leu Pro Ile Ala Gly Pro Ala Thr Ala Pro Ala Pro Arg
 485 490 495
 Pro Leu Gly Ser Ile Gln Arg Pro Asn Ser Phe Leu Phe Arg Ser Ser
 500 505 510
 Ser Gln Ser Gly Ser Gly Pro Ser Ser Pro Asp Ser Val Leu Arg Pro
 515 520 525
 Arg Arg Tyr Pro Gln Val Pro Asp Glu Lys Asp Leu Met Thr Gln Leu
 530 535 540
 Arg Gln Val Leu Glu Ser Arg Leu Gln Arg Pro Leu Pro Glu Asp Leu
 545 550 555 560
 Ala Glu Ala Leu Ala Ser Gly Val Ile Leu Cys Gln Leu Ala Asn Gln
 565 570 575
 Leu Arg Pro Arg Ser Val Pro Phe Ile His Val Pro Ser Pro Ala Val
 580 585 590
 Pro Lys Leu Ser Ala Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu
 595 600 605
 Glu Ala Cys Arg Lys Met Gly Val Pro Glu Ala Asp Leu Cys Ser Pro
 610 615 620
 Ser Asp Leu Leu Gln Gly Thr Ala Arg Gly Leu Arg Thr Ala Leu Glu
 625 630 635 640
 Ala Val Lys Arg Val Gly Gly Lys Ala Leu Pro Pro Leu Trp Pro Pro
 645 650 655
 Ser Gly Leu Gly Gly Phe Val Val Phe Tyr Val Val Leu Met Leu Leu
 660 665 670
 Leu Tyr Val Thr Tyr Thr Arg Leu Leu Gly Ser
 675 680

<210> 5565
 <211> 472
 <212> DNA
 <213> Homo sapiens

<400> 5565
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 120
 gaatgaagg gctcactggt agtgggtccc aattcgttg catattaaac cccccggaga
 180
 acttaaaact cagtgccag tctatgcaa tcagatcctg ggtctcact gtgcagcgcc
 240
 cgtggagagc cagcgatgtg gagggctgag atcaccagct tctttgggga cagggtctca
 300
 ctgccccaa ggctggagtc cgggtggtgca atcacggctc acagcagctc cgacctccag
 360
 ggctcaagcg atcctccagc ctacagctcc cgagcagctg ggagcacagg cgcataccac
 420
 gcgtggcttt tttagacga gggcttgcca tgtttccacg gctgtctcgc aa
 472

<210> 5566
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 5566
 Met Gln Ser Asp Pro Gly Ser Pro Leu Cys Ser Ala Arg Gly Glu Pro
 1 5 10 15
 Ala Met Trp Arg Val Glu Ile Thr Gln Phe Phe Gly Asp Arg Val Ser
 20 25 30
 Leu Pro Pro Arg Leu Glu Ser Gly Gly Ala Ile Thr Ala His Ser Ser
 35 40 45
 Leu Asp Leu Gln Gly Ser Ser Asp Pro Pro Ala Ser Ala Ser Arg Ala
 50 55 60
 Ala Gly Ser Thr Gly Ala Tyr His Ala Trp Leu Phe
 65 70 75

<210> 5567
 <211> 968
 <212> DNA
 <213> Homo sapiens

<400> 5567
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 aatttcatat gcttttttca tgccacaaaa tattattctt ttgattgtat tcaacctttt
 120
 taaaaccat ttttagctca caagctgtac aaaaacagac ggtgagtaaa ttggccaca
 180
 gaccggtttg ctagccctg ggcttaagag atctgtccac ttactcctca acatgcagag
 240

tgtgaactgt gtgaactgca taggccacag caatcttact gcatccattc ccgctgcatc
 300
 attatttttg atttgtattc attcagtcga ccgaagcatt cactttggcac ctctccaaat
 360
 ctgggtactg tgcaagatcc ttccctggga cactgaagga aaatcagaca cggcccttct
 420
 ctcaagttcg cagactctcc ggtatccaga tactacggct ctcatagtat cagaaaacac
 480
 agccacaagc gcaggtaagt atcagagggt ttttacgaga tacatgtatc agattcttaa
 540
 ggctgctgta ccaaaatacc acaaactgca tggcttaaaa caacagaaat ttattccctc
 600
 acaatcctgg aggccagatg tctgaaatca agatattggt aggggttggt ccttctcgag
 660
 actctgaggg agaactctgt acatgcctgt ttccctagct tctagtactc tcctccaatt
 720
 cttagggttc tttggctcat agatgcattg ctctaattct tgccctccatc ttccccatggc
 780
 cttcagctct gtgtgtctat ttcccccttct ttcttaagag ctagtatttg aatttagggc
 840
 ccaccctact acaggttgat ctcatctcca ggtccttgat ttcatctgca aaaacttttt
 900
 ccaaataatg tcacacgtgg agattcccag tgaatgtatc tcctgggggc cactattcag
 960
 cctattac
 968

<210> 5568

<211> 130

<212> PRT

<213> Homo sapiens

<400> 5568

Met Gln Ser Val Asn Cys Val Asn Cys Ile Gly His Ser Asn Leu Thr
 1 5 10 15
 Ala Ser Ile Pro Ala Ala Ser Leu Phe Leu Ile Cys Ile His Ser Val
 20 25 30
 His Arg Ser Ile His Leu Ala Pro Leu Gln Ile Trp Val Leu Cys Lys
 35 40 45
 Ile Leu Pro Trp Asp Thr Glu Gly Lys Ser Asp Thr Ala Leu Leu Ser
 50 55 60
 Ser Ser Gln Thr Leu Arg Tyr Pro Asp Thr Thr Ala Leu Ile Val Ser
 65 70 75 80
 Glu Asn Thr Ala Thr Ser Ala Gly Lys Tyr Gln Arg Cys Phe Thr Arg
 85 90 95
 Tyr Met Tyr Gln Ile Leu Lys Ala Val Pro Lys Tyr His Lys Leu
 100 105 110
 His Gly Leu Lys Gln Gln Lys Phe Ile Pro Ser Gln Ser Trp Arg Pro
 115 120 125
 Asp Val
 130

<210> 5569

<211> 876

<212> DNA

<213> Homo sapiens

<400> 5569

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ttaagtaaaa tgaagaacat ttactttatt tttatgtcca gtacagtcaa agcagccaca
120
ttgcataacc ccggggggacc cctttcctct ttgtgatgcc ccagaacaat attgatttga
180
ttatagaaaag ccaccggcag cctacatgcg caacgggtgag ttgttggtta tatacactgt
240
ggaccataca gtggaatatt acagtcaata aaaggtatatt ttagagagaa aaaaaaacat
300
tggaacacgc ttatgatata atgttaggca aaatcgctgt tatgaacagc tcgtttgggg
360
cagagcaaat cctgggaagt aacgctgagg ctgttggtgc aggcggtgga gtacaacatc
420
ttcgagggta tggagtgcga cggtcccca ctagtgtgca tcagccaggg caagatcgtc
480
tttgaagacg gaaacatcaa cgtaacaag ggcattggcc gcttcattcc gcggaaggcg
540
ttccccggag acagttccac gtggctggaa cttcacaatc atggcagaag gcacgtctgc
600
gaggcatcct ggggctgcac tgctgacatc cttctctctc ccctggccct gagtgtctgc
660
ttcatgtggc tcagcccttc cgtccttcaa gccttcatca gcttcagggc agccccaggt
720
ctgtgcccgag gtacactggc taaaatgcag tgtcttccaa atagccatat ctcttttaat
780
caggggagcaa ttccagcatg gaagtcccca tcatgctcct gctggcaggt acaggtgcga
840
gtttgtgacg gatgaaagca ccgacagccc acgcgt
876

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<210> 5570

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5570

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Thr Ala Arg Leu Gly Gln Ser Lys Ser Trp Glu Val Thr Leu Arg Leu
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Leu Val Gln Ala Val Glu Tyr Asn Ile Phe Glu Gly Met Glu Cys His
20      25      30
Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35      40      45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50      55      60
Ala Phe Pro Glu His Ser Ser Thr Trp Leu Glu Leu His Asn His Gly
65      70      75      80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85      90      95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

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      100              105              110
Val Leu Gln Ala Phe Ile Ser Phe Arg Ala Ala Pro Ser Leu Cys Pro
      115              120              125
Gly Thr Leu Ala Lys Met Gln Cys Leu Pro Asn Ser His Ile Ser Phe
      130              135              140
Asn Gln Gly Ala Ile Pro Ala Trp Lys Ser Pro Ser Cys Ser Cys Trp
145              150              155              160
Gln Val Gln Val Pro Val Cys Asp Gly
      165

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<210> 5571

<211> 405

<212> DNA

<213> Homo sapiens

<400> 5571

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atgggtcacgg cttcagaaag gatctttgtt ctcaaccaac tcagagatcc cacttcgcct
120
aagtttccag aagactttga cgatggagag catgcaaagc agaaatcagt catctcctgg
180
ctgttgaaac acgatccagc aaaacggccc acagccacag aactgctcaa gagtgagctg
240
ctgcccccac cccagatgga ggagtcagag ctgcatgaag tgctgcacca cacgctgacc
300
aacgtgggatg ggaaggccta ccgaccatg atggcccaga tcttctcgca ggcctcgct
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405

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<210> 5572

<211> 135

<212> PRT

<213> Homo sapiens

<400> 5572

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Asn Gln Lys Val Asp Leu Phe Ser Leu Gly Ile Ile Phe Phe Glu Met
1      5      10      15
Ser Tyr His Pro Met Val Thr Ala Ser Glu Arg Ile Phe Val Leu Asn
      20      25      30
Gln Leu Arg Asp Pro Thr Ser Pro Lys Phe Pro Glu Asp Phe Asp Asp
      35      40      45
Gly Glu His Ala Lys Gln Lys Ser Val Ile Ser Trp Leu Leu Asn His
      50      55      60
Asp Pro Ala Lys Arg Pro Thr Ala Thr Glu Leu Lys Ser Glu Leu
65      70      75      80
Leu Pro Pro Pro Gln Met Glu Glu Ser Glu Leu His Glu Val Leu His
      85      90      95
His Thr Leu Thr Asn Val Asp Gly Lys Ala Tyr Arg Thr Met Met Ala
      100      105      110
Gln Ile Phe Ser Gln Arg Leu Ala Gly Ala Gly Gly Gly Tyr Arg
      115      120      125
Ser Arg Leu Gly Val Pro Arg

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130

<210> 5573
 <211> 1279
 <212> DNA
 <213> Homo sapiens

135

<400> 5573
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 120
 tccgtcagag cctaggggag cctgccctcc cgcgctctcg cggggcccg ccaggcacct
 180
 tggccgcccgc gcacgggacg cgggcacgag cactagatca cggctgtgtg acctcggcac
 240
 gttgacaaga tttctctggg gtaccgcgga ggattacttt gaatttcggt ggtcgctgtg
 300
 ggtctggcat atttagaact taagtctatt atttcggga ccatgacttt gaggtcttta
 360
 gaagactggt gcagggggat ggacatgaac cctcggaag cgctattgat tgcgggcac
 420
 tcccagagct gcagtgtggc agaaatcgag gaggtctcgc aggtgtgtt agctcccttg
 480
 ggggagtaca gactgcttgg aaggatgttc aggagggatg agaacaggaa agtagcctta
 540
 gtagggtcta ctgcggagac tagtcacgcc ctggctcccta aggagatacc gggaaaaggg
 600
 ggtatctgga gagtgatctt taagccccct gaccagata atacattttt aagcagatta
 660
 aatgaatttt tagcgggaga gggcatgaca gtgggtgagt tgagcagagc tcttgacat
 720
 gaaaatggct ccttagacct agagcagggc atgatcccg aaatgtgggc ccctatgttg
 780
 gcacaggcat tagaggctct tcagcctgcc ctgcaatgct tgaagtataa aaagctgaga
 840
 gtgtttctcg gcagggagtc tccagaacca ggagaagaag aatttgagc ctggatgttt
 900
 catactactc agatgataaa ggcgtggcag gtgccagatg tagagaagag aaggcgattg
 960
 ctagagagcc ttcaggggcc agcacttgat gttattcgtg tcctcaagat aaacaatcct
 1020
 ttaattactg tcgatgaatg tctgcaggct cttgaggagg tatttggggt tacagataat
 1080
 cctagggagt tgcagggtcaa atatctaacc acttaccaga aggatgagga aaagtgtctg
 1140
 gcttatgtac taaggctgga gcctttgtta cagaagctgg tacagagagg agcaattgag
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 1260
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 1279

<210> 5574

<211> 312
 <212> PRT
 <213> Homo sapiens

<400> 5574
 Met Thr Leu Arg Leu Leu Glu Asp Trp Cys Arg Gly Met Asp Met Asn
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 Pro Arg Lys Ala Leu Leu Ile Ala Gly Ile Ser Gln Ser Cys Ser Val
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 Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro Leu Gly Glu
 35 40 45
 Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val
 50 55 60
 Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys
 65 70 75 80
 Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro
 85 90 95
 Asp Pro Asp Asn Thr Phe Leu Ser Arg Leu Asn Glu Phe Leu Ala Gly
 100 105 110
 Glu Gly Met Thr Val Gly Glu Leu Ser Arg Ala Leu Gly His Glu Asn
 115 120 125
 Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro
 130 135 140
 Met Leu Ala Gln Ala Leu Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu
 145 150 155 160
 Lys Tyr Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro
 165 170 175
 Gly Glu Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile
 180 185 190
 Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu
 195 200 205
 Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn
 210 215 220
 Asn Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val
 225 230 235 240
 Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu Thr
 245 250 255
 Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu
 260 265 270
 Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp
 275 280 285
 Ala Val Asn Gln Ala Arg Leu Asp Gln Val Ile Ala Gly Ala Val His
 290 295 300
 Lys Thr Ile Arg Arg Glu Leu Asn
 305 310

<210> 5575
 <211> 2405
 <212> DNA
 <213> Homo sapiens

<400> 5575
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120
ttagcatata cagtagagtt tctaattgttgc tcagcattcc ctagtgggag gttacaagtt
180
aggttgggat tctaatacata ttttatgata tctcacagat taaattgcac tttgtctctg
240
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300
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ccagtggagg ctctgaaagg tctgtgggat aagcttcaag cgttaaccgg caatgagggc
420
cgctgtctg tggaaaacat caagcagctg ttgcaatgtt tagtcccagg aagcaccact
480
ctgcacagtg ctgagatttt ggctgaaatc gcccgatcc ttcggcctgg tggatgtctt
540
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660
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720
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780
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900
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960
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1020
gaagcctgca gtcactttag cttttcatta gcagagacca cgaactgtatc actcattgct
1080
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1140
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1560
cagtgggtgt tagtgetgct gtgtatcaaa agaccaaggt attatgggac ctggtttcag
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1680

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 1740
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 1980
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 2040
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 2100
 agtttgagcc attggaggaa cttagtgtca cgcacaaatg gggctatttc tacgcttaga
 2160
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 2220
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 2280
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 cttga
 2405

<210> 5576

<211> 367

<212> PRT

<213> Homo sapiens

<400> 5576

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Asp	Lys	Ser	Ser	Pro	Val	Glu	Ala	Leu	Lys	Gly	Leu	Val	Asp	Lys	Leu
			20					25					30		
Gln	Ala	Leu	Thr	Gly	Asn	Glu	Gly	Arg	Val	Ser	Val	Glu	Asn	Ile	Lys
		35					40						45		
Gln	Leu	Leu	Gln	Cys	Leu	Val	Pro	Gly	Ser	Thr	Thr	Leu	His	Ser	Ala
	50					55					60				
Glu	Ile	Leu	Ala	Glu	Ile	Ala	Arg	Ile	Leu	Arg	Pro	Gly	Gly	Cys	Leu
65				70				75						80	
Phe	Leu	Lys	Glu	Pro	Val	Glu	Thr	Ala	Val	Asp	Asn	Asn	Ser	Lys	Val
			85					90					95		
Lys	Thr	Ala	Ser	Lys	Leu	Cys	Ser	Ala	Leu	Thr	Leu	Ser	Gly	Leu	Val
		100						105					110		
Glu	Val	Lys	Glu	Leu	Gln	Arg	Glu	Pro	Leu	Thr	Pro	Glu	Glu	Val	Gln
		115				120					125				
Ser	Val	Arg	Glu	His	Leu	Gly	His	Glu	Ser	Asp	Asn	Leu	Leu	Phe	Val
	130					135					140				
Gln	Ile	Thr	Gly	Lys	Lys	Pro	Asn	Phe	Glu	Val	Gly	Ser	Ser	Arg	Gln
				150					155					160	
Leu	Lys	Leu	Ser	Ile	Thr	Lys	Lys	Ser	Ser	Pro	Ser	Val	Lys	Pro	Ala

	165		170		175
Val Asp Pro Ala Ala Ala Lys Leu Trp Thr Leu Ser Ala Asn Asp Met					
	180		185		190
Glu Asp Asp Ser Met Cys Ile Phe Cys Gly Cys Ser Leu Thr His Arg					
	195		200		205
Trp Pro Leu Glu His Val Val Arg Leu Asn Met Met Ile Asn Gln Lys					
	210		215		220
Glu Asp Arg Val Asp Thr Phe Phe Thr Leu Asp Ser Lys Phe Pro Leu					
	225		230		235
Glu Ala Cys Ser His Phe Ser Phe Ser Leu Ala Glu Thr Thr Thr Val					
	245		250		255
Ser Leu Ile Ala Leu Asn Thr Leu Gln Asp Leu Ile Asp Ser Asp Glu					
	260		265		270
Leu Leu Asp Pro Glu Asp Leu Lys Lys Pro Asp Pro Ala Ser Leu Arg					
	275		280		285
Ala Ala Ser Cys Gly Glu Gly Lys Lys Arg Lys Ala Cys Lys Asn Cys					
	290		295		300
Thr Cys Gly Leu Ala Glu Glu Leu Glu Lys Glu Lys Ser Arg Glu Gln					
	305		310		315
Met Ser Ser Gln Pro Lys Ser Ala Cys Gly Asn Cys Tyr Leu Gly Asp					
	325		330		335
Ala Phe Arg Cys Ala Ser Cys Pro Tyr Leu Gly Met Pro Ala Phe Lys					
	340		345		350
Pro Gly Glu Lys Val Leu Leu Ser Asp Ser Asn Leu His Asp Ala					
	355		360		365

<210> 5577

<211> 659

<212> DNA

<213> Homo sapiens

<400> 5577

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120
cctgtggccg acatgagggc actcctgaca ggcaaggact gccccatgt ccgggagaag
180
ggctccggga agcagaacaa ggacctctat gagggtgcct tctcaatcag ctatgaccgt
240
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300
acagatgggc tcagtgccct gctgggcagt cccatgggca gcgagcagac acggctggac
360
ctggagcagc tgctgacct ggagaccaag ctgcgtctgc tggagctgga gaactgtccc
420
atccccgagc ggccaccccc tgtgccccca cccccacca acttcaactt ctgctatgac
480
tgacgcatcg ctgaaccttg acagtgtggc tggccatggg ccacagctgc ggccactgca
540
gcagccatga agggcagtg gtagaggagt gcaggcaccc tgaccagcag agattgctgc
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659

<210> 5578

<211> 166

<212> PRT

<213> Homo sapiens

<400> 5578

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Leu His Ala Asp Lys Leu Trp Phe Cys Cys Leu Ser Pro Asn His Lys
 1           5           10           15
Leu Leu Gln Tyr Gly Asp Met Glu Gly Xaa Gln Pro Ala Tyr Pro
          20           25           30
Xaa Glu Ser Leu Pro Glu Gln Leu Pro Val Ala Asp Met Arg Ala Leu
          35           40           45
Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys
          50           55           60
Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg
65           70           75           80
Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu
          85           90           95
Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met
          100          105          110
Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu
          115          120          125
Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg
          130          135          140
Pro Pro Pro Val Pro Pro Pro Pro Thr Asn Phe Asn Phe Cys Tyr Asp
145          150          155          160
Cys Ser Ile Ala Glu Pro
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<210> 5579

<211> 1312

<212> DNA

<213> Homo sapiens

<400> 5579

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120
cacttactac ctacagctcc aactaccgtg aatgtaacac atcgtccagt aactcagggtg
180
accacaagac tccctgtacc aagagctcct gcaaaccacc aggtgggtta tacaactctt
240
cctgcaccac cagctcaggc tcccttgcca ggaactgtta tgcaggctcc tgctgttcgg
300
cagggtcaatc cccaaaatag tggttacagt cgagtgcctc aaacaaccac atatgttgta
360
aacaatggac taaccctggg atcaacagga cctcagctca cagtgcacat cggaccacca
420
caagtgcata ctgagcccc acgccccgtg caccacagcac ccttaccaga agctccacaa
480
ccacagcgtc tgccccaga agctgccagc acatctctgc ctcagaagcc acattggaag
540

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tttagcacgcg ttcagagtca aaatggcata gtactgtcat ggagtgtcct ggaggtggat
 600
 cgaagctgtg ccactgttga tagctaccat ctctatgctt accatgagga acccagtgcc
 660
 actgtgccct cacaatggaa aaagattggg gaagtcaagg cacttccctt gcccatggca
 720
 tgtactctca cccagtttgt atctggttagc aaatactact ttgcagtacg agccaaggat
 780
 atttatggac gttttgggcc tttctgtgat cctcagtaaa cagatgtgat ctctcttacc
 840
 cagagcagtt aaaccttgga gcctttatat tttcctcttt taaaatttcc accttttggg
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 cttgttttta atcttgtgca tgatacccca tgtaaaatcc accttgtgca agatttcttg
 960
 gacagatgtg tgtatacact acatttgttt ataaccagaa gcaaaataaa ctcagccac
 1020
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 1080
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 1200
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 1312

<210> 5580

<211> 283

<212> PRT

<213> Homo sapiens

<400> 5580

Thr Pro Val Ser Thr Met Ser Ser Ser Gln Pro Val Ser Arg Pro Leu
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 20 25 30
 Ser Gly Pro Ser Gln Thr Thr Ile His Leu Leu Pro Thr Ala Pro Thr
 35 40 45
 Thr Val Asn Val Thr His Arg Pro Val Thr Gln Val Thr Thr Arg Leu
 50 55 60
 Pro Val Pro Arg Ala Pro Ala Asn His Gln Val Val Tyr Thr Thr Leu
 65 70 75 80
 Pro Ala Pro Pro Ala Gln Ala Pro Leu Arg Gly Thr Val Met Gln Ala
 85 90 95
 Pro Ala Val Arg Gln Val Asn Pro Gln Asn Ser Val Thr Val Arg Val
 100 105 110
 Pro Gln Thr Thr Thr Tyr Val Val Asn Asn Gly Leu Thr Leu Gly Ser
 115 120 125
 Thr Gly Pro Gln Leu Thr Val His His Arg Pro Pro Gln Val His Thr
 130 135 140
 Glu Pro Pro Arg Pro Val His Pro Ala Pro Leu Pro Glu Ala Pro Gln
 145 150 155 160
 Pro Gln Arg Leu Pro Pro Glu Ala Ala Ser Thr Ser Leu Pro Gln Lys

```

                165                170                175
Pro His Leu Lys Leu Ala Arg Val Gln Ser Gln Asn Gly Ile Val Leu
                180                185                190
Ser Trp Ser Val Leu Glu Val Asp Arg Ser Cys Ala Thr Val Asp Ser
                195                200                205
Tyr His Leu Tyr Ala Tyr His Glu Glu Pro Ser Ala Thr Val Pro Ser
                210                215                220
Gln Trp Lys Lys Ile Gly Glu Val Lys Ala Leu Pro Leu Pro Met Ala
                225                230                235                240
Cys Thr Leu Thr Gln Phe Val Ser Gly Ser Lys Tyr Tyr Phe Ala Val
                245                250                255
Arg Ala Lys Asp Ile Tyr Gly Arg Phe Gly Pro Phe Cys Asp Pro Gln
                260                265                270
Ser Thr Asp Val Ile Ser Ser Thr Gln Ser Ser
                275                280

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<210> 5581

<211> 720

<212> DNA

<213> Homo sapiens

<400> 5581

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120
gcgtcccgcg agctgcctgt ctgcgtctgg caggtcacgc agccgtcaag caagaatctg
180
tgaggagcaga tctgcaagga gtatgaagct gacgagcctc cctttccaga aggatataaa
240
gtcaaacagg agcctgtgat tacgggttgc ccagtagagg aaatgctttt tcatggcttc
300
agtgcagagc actattttcc ggtttcccat ttcacatga tctcagctac accctgtctc
360
caagataaat cggaaacaat caacccaaaa acatgttttc ccaaagaata ttggaaact
420
ttcatctttc ctgttctgct tcccggaatg gctagcgtgc ttcaccaagc gaagaaagaa
480
aaatgttttg aggtcagttg ttgggcagga ttcttttatt ttgagattct caatcattca
540
ttattatcag atgatagctc attatcttgg taccatcagg ttgttctcca gatgacccct
600
tcgggagggg aagcctgtgt ttggggtcac ttaccaggtt ccagccacac catctagtgt
660
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720

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<210> 5582

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5582

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Met Ala Ala Pro Arg Gln Ile Pro Ser His Ile Val Arg Leu Lys Pro

```

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Ser Cys Ser Thr Asp Ser Ser Phe Thr Arg Thr Pro Val Pro Thr Val
      20             25             30
Ser Leu Ala Ser Arg Glu Leu Pro Val Ser Ser Trp Gln Val Thr Glu
      35             40             45
Pro Ser Ser Lys Asn Leu Trp Glu Gln Ile Cys Lys Glu Tyr Glu Ala
      50             55             60
Glu Gln Pro Pro Phe Pro Glu Gly Tyr Lys Val Lys Gln Glu Pro Val
      65             70             75             80
Ile Thr Val Ala Pro Val Glu Glu Met Leu Phe His Gly Phe Ser Ala
      85             90             95
Glu His Tyr Phe Pro Val Ser His Phe Thr Met Ile Ser Arg Thr Pro
      100            105            110
Cys Pro Gln Asp Lys Ser Glu Thr Ile Asn Pro Lys Thr Cys Ser Pro
      115            120            125
Lys Glu Tyr Leu Glu Thr Phe Ile Phe Pro Val Leu Leu Pro Gly Met
      130            135            140
Ala Ser Leu Leu His Gln Ala Lys Lys Glu Lys Cys Phe Glu Val Ser
      145            150            155            160
Cys Leu Ala Gly Phe Leu Tyr Phe Glu Ile Leu Asn His Ser Leu Leu
      165            170            175
Ser Asp Asp Ser Ser Leu Ser Trp Tyr His Gln Val Val Leu Gln Met
      180            185            190
Thr Pro Ser Gly Gly Lys Ala Cys Val Trp Gly His Leu Pro Ser Ser
      195            200            205
Ser His Thr Ile
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<210> 5583

<211> 2101

<212> DNA

<213> Homo sapiens

<400> 5583

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120
gtgggggccc ctgccggccc agcccccatt gccttcacca gtacctgga gaaggtcgga
180
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240
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300
ctggatgaga cggtgctgtg ggtggtgcac gtctctggcc ccattaaccc ccaggtgctc
360
aaaagcaaa cagccaagga gctcaaggcg ctgcaggact tggcaggaa ggaatgctg
420
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480
ctcttcagcc caggagtga aatgaagaag atcactgaca cccacacgcc gtctggcctc
540
accgtgaacc tgacgtcta ttacatgctc tcctgctcgc cagccccact gctcagcccc
600

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tccctgagcc acagggagcg agaccagatg gagtgcagcg tcaactatga agatcactgc
660
ttcagcgggc acgccaccat gcacgccgag aacctgtggc cggggcggtc gtccctccgtc
720
cagcagatcc tgcagctctc tgacctgtgg aggcagacc tccagaagcg tgggtgcaag
780
gggctggtga aggtgggtgc ccagggcatc ctgcagggga tgggtgctcag ctttgggggg
840
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900
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1080
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1200
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1260
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1320
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1680
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2101

<210> 5584

<211> 454

<212> PRT

<213> Homo sapiens

<400> 5584

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Gly Arg Pro His Val Tyr Leu Gln Arg Ile Gln Leu Asn Asn Pro Thr
 20           25           30
Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala
 35           40           45
Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe
 50           55           60
Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His
 65           70           75           80
Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala
 85           90           95
Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser
 100          105          110
Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu
 115          120          125
Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp
 130          135          140
Met Pro Ala Ala Glu Leu Leu Gln Asp His Gln Leu Leu Trp Ala Gln
 145          150          155          160
Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr
 165          170          175
Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys
 180          185          190
Ser Pro Ala Pro Leu Leu Ser Pro Ser Leu Ser His Arg Glu Arg Asp
 195          200          205
Gln Met Glu Ser Thr Leu Asn Tyr Glu Asp His Cys Phe Ser Gly His
 210          215          220
Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val
 225          230          235          240
Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys
 245          250          255
Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln
 260          265          270
Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu
 275          280          285
Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His
 290          295          300
Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met
 305          310          315          320
Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser
 325          330          335
Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val
 340          345          350
Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr
 355          360          365
Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu
 370          375          380
Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

```

```

385          390          395          400
Glu His Met Ala Gln Gln Asp Pro Gly Leu Pro Phe Leu Phe Trp Phe
          405          410          415
Ser Val Ala Ser Leu Ile Thr Leu Phe His Leu Phe Leu Lys Leu
          420          425          430
Ile Tyr Asn Glu Tyr Cys Gly Pro Gly Ala Lys Pro Leu Phe Arg Ser
          435          440          445
Lys Glu Asp Pro Ser Val
          450

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<210> 5585
<211> 740
<212> DNA
<213> Homo sapiens

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<400> 5585
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120
ctcacagaag taaaatatac aatgctacat tgagtgggta aaaatacaca aaaaagttagt
180
ttaaacaatc tataaathtt ttataactta aatcatgatt gagttgaaat aaaaaagtgc
240
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300
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360
ttggagattc aggagcggag ctacagttcca cctcaactga gttccctggg gccaaagcagc
420
ctctctctcc ccagtatctt tcccatctta agagatcctg tctcacctac ctgtcacctc
480
cccaacccaa agactcctct aaacttcttt gcagcatgac agctgcctgc cctacactga
540
gtctacttga ctttcaattg cgtctccgca gagaggtagg agagggacac tgccccattc
600
tggacttgac ataagtaccc cagccacatg gccttcatcc ttatgacctg gcaggcagaa
660
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720
acaagctttg taaacctaac
740

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<210> 5586
<211> 87
<212> PRT
<213> Homo sapiens

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<400> 5586
Met Gly Ser Phe Gly Asp Ser Gly Ala Glu Leu Ser Ser Thr Ser Leu
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Gln Phe Pro Gly Ala Lys Gln Pro Ser Ser Pro Gln Tyr Leu Ser His
          20          25          30
Leu Lys Arg Ser Cys Pro Thr Tyr Leu Ser Pro Pro Gln Pro Lys Asp

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35	40	45
Ser Ser Lys Leu Leu Cys Ser Met Thr Ala Ala Cys Pro Thr Leu Ser		
50	55	60
Leu Leu Asp Leu Gln Leu Arg Leu Arg Arg Glu Val Gly Glu Gly His		
65	70	75
Cys Pro Ile Leu Asp Leu Thr		80
85		

<210> 5587

<211> 853

<212> DNA

<213> Homo sapiens

<400> 5587

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 120
 ttcattgttt tctcaatttg cttcagaaaa acttgcggga ttcgtccaca taaagtgtgc
 180
 acagctctcca aaaacttcag ctgaaggggg taatacatgg attgaaagag attgtcttga
 240
 aagggaataat cccgtattgc ttcataagagt gctctgaacg ttggttgctt atcgtcatgg
 300
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 360
 cttccgtaca tgcagtgatc gggacggtag ttccactggc aggggaatac atagagacac
 420
 tctgggttga aataaaaaat aatattttaa aaatcctggt ctccccacgt gatggcattc
 480
 ttgtacttct ggtacagagg gtacaacatg tctcccaag ccaggcctgt tggaatcatg
 540
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 660
 atttcgtgct cagggggccat ggctgcaagc tgggtggaat taaacagcct cagaagcttc
 720
 cagatgtcat caacaggtct cagaaagagg acatcggtgt ccacgtagag aagtgaagtc
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<210> 5588

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5588

Met Ala Pro Glu His Glu Ile Pro Lys Ile Gly Trp Tyr Ser Arg Phe
1 5 10 15
Ala Arg His Pro Phe Tyr Gly Ser Ala Gly Val Asn Ser Gly Val Met

		20						25				30				
Leu	Met	Asn	Leu	Thr	Arg	Ile	Arg	Ser	Thr	Gln	Phe	Lys	Asn	Ser	Met	
		35					40					45				
Ile	Pro	Thr	Gly	Leu	Ala	Trp	Glu	Asp	Met	Leu	Tyr	Pro	Leu	Tyr	Gln	
		50				55				60						
Lys	Tyr	Lys	Asn	Ala	Ile	Thr	Trp	Gly	Asp	Gln	Asp	Leu	Leu	Asn	Ile	
65					70					75				80		
Ile	Phe	Tyr	Phe	Asn	Pro	Glu	Cys	Leu	Tyr	Val	Phe	Pro	Cys	Gln	Trp	
			85						90					95		
Asn	Tyr	Arg	Pro	Asp	His	Cys	Met	Tyr	Gly	Ser	Asn	Cys	Arg	Glu	Ala	
			100					105					110			
Glu	His	Glu	Gly	Val	Ser	Val	Leu	His	Gly	Asn	Arg	Gly	Val	Tyr	His	
		115					120					125				
Asp	Asp	Lys	Gln	Pro	Thr	Phe	Arg	Ala	Leu	Tyr	Glu	Ala	Ile	Arg	Asp	
		130				135					140					
Phe	Pro	Phe	Gln	Asp	Asn	Leu	Phe	Gln	Ser	Met	Tyr	Tyr	Pro	Leu	Gln	
145					150					155				160		
Leu	Lys	Phe	Leu	Glu	Thr	Val	His	Thr	Leu	Cys	Gly	Arg	Ile	Pro	Gln	
			165						170					175		
Val	Phe	Leu	Lys	Gln	Ile	Glu	Lys	Thr	Met	Lys	Arg	Ala	Tyr	Glu	Lys	
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His	Val	Ile	Ile	His	Val	Gly	Pro	Asn	Gln	Met	His					
		195					200									

<210> 5589

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 5589

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120					
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180					
agcagtggca	gttcagatgc	ggaccagcga	gaccagcccg	ctccagagcc	tgaagaacaa
240					
gaggaaagaa	aacctcttgc	caccacgacg	aagaaaaaca	ccaaactctc	tagcaaaacc
300					
actgcctaag	tatccactag	tgctaaaaa	attcagaagg	agctagctga	aataaccctt
360					
gatcctctctc	ctaattgcag	tgtctgggct	aaaggagata	acattttatg	atggagatca
420					
actatacttg	gtccaccggg	tctctgtata	gaaggtgggt	tgttttttct	ggatatcaca
480					
ttttcatcag	attatccatt	taagccacca	aaggttactt	tccgcaccag	aatctatcac
540					
tgcaacatca	acagtcaggg	agtcactctg	ctggacatcc	ttaaagacaa	ctggagtcct
600					
gctttgacta	tttcaaagg	tttctgtctt	atttgttccc	ttttgacaga	ctgcaacctt
660					
gcggcactctc	tggttggaag	catagccact	cagtatttga	ccaacagagc	agaacacgac
720					

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aggatagacca gacagtggac caagagatata gcaacataat tcacataaatt tgtatgcaagt
780
gtgaaggagac agaaggcatc ttctcactgt gctgcaaatc ttatatgcct ttacaatacg
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<210> 5590

<211> 207

<212> PRT

<213> Homo sapiens

<400> 5590

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<211> 2194

<212> DNA

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<212> PRT

<213> Homo sapiens

<400> 5592

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 65 70 75 80
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 85 90 95Pro Phe Leu
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 100 105 110
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<212> DNA

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Gly Glu Met Ala Asp Phe Gly Ala Met Gly Cys Val Asp Ile Met Pro
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<213> Homo sapiens

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 115 120 125
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 165 170 175
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 180 185 190
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<211> 312

<212> PRT

<213> Homo sapiens

<400> 5598

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<210> 5599

<211> 4492

<212> DNA

<213> Homo sapiens

<400> 5599

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<210> 5600

<211> 923

<212> PRT

<213> Homo sapiens

<400> 5600

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Ala	Tyr	Val	Arg	Val	Leu	Asp	Leu	His	Lys	Lys	Pro	Phe	Leu	Ala	Lys
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Tyr	Phe	Pro	Phe	Met	Asp	Leu	Lys	Leu	Arg	Ala	Ala	Ser	Pro	Ile	Ile
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Thr	Leu	Val	Ala	Leu	Asp	Glu	Ala	Leu	Asp	Asn	Tyr	Thr	Ile	Thr	Phe
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Thr	Asn	Lys	Ala	Gly	Gln	Arg	Ile	Asn	Ser	Ala	Pro	Gln	Gln	Ile	Glu
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Val	Phe	Pro	Pro	Phe	Arg	Leu	Met	Pro	Arg	Lys	Val	Thr	Leu	Leu	Ile
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Leu	Val	Gln	Ala	Val	Asp	Ala	Glu	Thr	Gly	Lys	Val	Val	Ile	Ile	Ser
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Gln	Asp	Leu	Val	Gln	Val	Glu	Val	Leu	Leu	Leu	Arg	Ala	Val	Arg	Ile
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Arg Asp Asp Phe Val Gln Ile Gly Lys Gly Pro Thr Asn Asn Thr Cys
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Ser Ser Ser Ala Asn Ser Ile Leu His Ile Asp Pro Lys Thr Gly Val
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<211> 670

<212> DNA

<213> Homo sapiens

<400> 5601

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 Gln Glu Pro Glu Cys Arg Arg Asn Leu Val Gln Cys Leu Leu Glu Lys
 65 70 75 80
 Gln Gly Thr Pro Val Val Gln Gly Ser Leu Glu Leu Glu Arg Val Met
 85 90 95
 Ser Ser Leu Leu Asp Met Gly Phe Ser Asn Ala His Ile Asn Glu Leu
 100 105 110
 Leu Ser Val Arg Arg Gly Ala Ser Leu Gln Gln Leu Leu Asp Ile Ile
 115 120 125
 Ser Glu Phe Ile Leu Leu Gly Leu Asn Pro Glu Pro Val Cys Val Val
 130 135 140
 Leu Lys Lys Ser Pro Gln Leu Leu Lys Leu Pro Ile Met Gln Met Arg
 145 150 155 160
 Lys Arg Ser Ser Tyr Leu Gln Lys Leu Gly Leu Gly Glu Gly Lys Leu
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 Lys Arg Val Leu Tyr Cys Cys Pro Glu Ile Phe Thr Met Arg Gln Gln
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 Val Pro Leu His Ala
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<210> 5603
 <211> 2070
 <212> DNA
 <213> Homo sapiens

<400> 5603
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 2070

<210> 5604

<211> 560

<212> PRT

<213> Homo sapiens

<400> 5604

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			20					25					30		
His	Val	Cys	Arg	Pro	Pro	Gly	Asn	Val	Ser	Gln	Val	Val	Phe	His	Asn
		35					40					45			
His	Ser	Asn	Trp	Ser	Leu	Glu	Asp	Thr	Gly	Ala	Leu	Leu	Ser	Ser	Gly
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Gln	Lys	Asp	Tyr	Val	Thr	Val	Gln	Leu	Gln	Asn	Gly	Glu	Ile	Trp	Glu
65				70					75					80	
Leu	Ser	Arg	Cys	Ser	Arg	Asn	Lys	Arg	Glu	Asn	Thr	Ser	Ser	Leu	Gly
			85						90					95	
Tyr	Glu	Tyr	Thr	Gly	Ser	Lys	Lys	Glu	Phe	Pro	Cys	Val	Asp	Gly	Tyr
			100					105					110		
Ile	Tyr	Asp	Gln	Asn	Thr	Trp	Lys	Ser	Thr	Ala	Val	Thr	Gln	Trp	Asn
		115				120						125			
Leu	Val	Cys	Asp	Arg	Lys	Trp	Leu	Ala	Met	Leu	Ile	Gln	Pro	Leu	Phe
		130				135					140				
Met	Phe	Gly	Val	Leu	Leu	Gly	Ser	Val	Thr	Phe	Gly	Tyr	Phe	Ser	Asp
145				150						155					160
Arg	Leu	Gly	Arg	Arg	Val	Val	Leu	Trp	Ala	Thr	Ser	Ser	Ser	Met	Phe
			165						170						175
Leu	Phe	Gly	Ile	Ala	Ala	Ala	Phe	Ala	Val	Asp	Tyr	Tyr	Thr	Phe	Met
			180					185					190		
Ala	Ala	Arg	Phe	Phe	Leu	Ala	Met	Val	Ala	Ser	Gly	Tyr	Leu	Val	Val
		195				200						205			
Gly	Phe	Val	Tyr	Val	Met	Glu	Phe	Ile	Gly	Met	Lys	Ser	Arg	Thr	Trp
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Ala	Ser	Val	His	Leu	His	Ser	Phe	Phe	Ala	Val	Gly	Thr	Leu	Leu	Val
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Ala	Leu	Thr	Gly	Tyr	Leu	Val	Arg	Thr	Trp	Trp	Leu	Tyr	Gln	Met	Ile
			245						250					255	
Leu	Ser	Thr	Val	Thr	Val	Pro	Phe	Ile	Leu	Cys	Cys	Trp	Val	Leu	Pro
		260					265						270		
Glu	Thr	Pro	Phe	Trp	Leu	Leu	Ser	Glu	Gly	Arg	Tyr	Glu	Glu	Ala	Gln
		275					280					285			
Lys	Ile	Val	Asp	Ile	Met	Ala	Lys	Trp	Asn	Arg	Ala	Ser	Ser	Cys	Lys
		290				295					300				
Leu	Ser	Glu	Leu	Leu	Ser	Leu	Asp	Leu	Gln	Gly	Pro	Val	Ser	Asn	Ser
305				310						315					320
Pro	Thr	Glu	Val	Gln	Lys	His	Asn	Leu	Ser	Tyr	Leu	Phe	Tyr	Asn	Trp
			325					330					335		
Ser	Ile	Thr	Lys	Arg	Thr	Leu	Thr	Val	Trp	Leu	Ile	Trp	Phe	Thr	Gly

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          340          345          350
Ser Leu Gly Phe Tyr Ser Phe Ser Leu Asn Ser Val Asn Leu Gly Gly
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Asn Glu Tyr Leu Asn Leu Phe Leu Leu Gly Val Val Glu Ile Pro Ala
          370          375          380
Tyr Thr Phe Val Cys Ile Ala Met Asp Lys Val Gly Arg Arg Thr Val
          385          390          395          400
Leu Ala Tyr Ser Leu Phe Cys Ser Ala Leu Ala Cys Gly Val Val Met
          405          410          415
Val Ile Pro Gln Lys His Tyr Ile Leu Gly Val Val Thr Ala Met Val
          420          425          430
Gly Lys Phe Ala Ile Gly Ala Ala Phe Gly Leu Ile Tyr Leu Tyr Thr
          435          440          445
Ala Glu Leu Tyr Pro Thr Ile Val Arg Ser Leu Ala Val Gly Ser Gly
          450          455          460
Ser Met Val Cys Arg Leu Ala Ser Ile Leu Ala Pro Phe Ser Val Asp
          465          470          475          480
Leu Ser Ser Ile Trp Ile Phe Ile Pro Gln Leu Phe Val Gly Thr Met
          485          490          495
Ala Leu Leu Ser Gly Val Leu Thr Leu Lys Leu Pro Glu Thr Leu Gly
          500          505          510
Lys Arg Leu Ala Thr Thr Trp Glu Glu Ala Ala Lys Leu Glu Ser Glu
          515          520          525
Asn Glu Ser Lys Ser Ser Lys Leu Leu Leu Thr Thr Asn Asn Ser Gly
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<210> 5605

<211> 376

<212> DNA

<213> Homo sapiens

<400> 5605

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240
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<210> 5606

<211> 101

<212> PRT

<213> Homo sapiens

<400> 5606

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      20             25             30
Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Ser Ser
      35             40             45
Asp Val Pro Ser Ser Ser Leu Glu Arg Pro Pro Trp Met Thr Glu Glu
      50             55             60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
 65             70             75             80
Ser Gln Cys Leu Ala Pro Ser Asn Ile Ala Phe Cys Val Tyr His Gln
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Phe Pro Phe Thr Arg
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<210> 5607

<211> 320

<212> DNA

<213> Homo sapiens

<400> 5607

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120
gggaagtctgc tggaccagtg tgtggagacc ctgcagaagc agaccagggt tggcaaggct
180
ggcaccaaca agccccccag gtgcggggga agagggggcca ggctggggg cgcgccagct
240
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320

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<210> 5608

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5608

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Val His Thr Arg Gly Ile Gly Ser Arg Leu Leu Thr Lys Met Gly Tyr
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Glu Phe Gly Lys Gly Leu Gly Arg His Ala Glu Gly Arg Val Glu Pro
      20             25             30
Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
      35             40             45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
      50             55             60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
 65             70             75             80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
      85             90             95
Pro Gly Ala Leu Gln Ala Gly Arg Pro Gln

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100

105

<210> 5609

<211> 1843

<212> DNA

<213> Homo sapiens

<400> 5609

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240
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1320
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1380

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<210> 5610

<211> 153

<212> PRT

<213> Homo sapiens

<400> 5610

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		20						25					30		
Phe	Thr	Gly	Arg	Gln	Asp	His	Thr	Ser	Leu	Pro	His	Trp	Ala	Cys	
		35			40						45				
Leu	Leu	Val	Asp	Ser	Cys	Met	Gln	Glu	Ala	Val	Met	Gly	Ser	Leu	Arg
		50			55						60				
Ile	Pro	Gln	Cys	Gly	Asn	Gly	Pro	Leu	Arg	Leu	Val	Leu	Arg	Val	Pro
65					70				75					80	
Gly	Ala	Gln	Ser	Trp	Val	Gly	Gly	Cys	Trp	Trp	Glu	Val	Arg	Asn	Lys
			85					90					95		
Phe	Trp	Leu	Pro	Ser	Gly	Gln	Leu	Pro	Thr	Ala	Leu	Thr	Trp	Glu	Val
			100					105					110		
Asp	Ala	His	Arg	Gln	Asp	Ala	Leu	Gly	Tyr	Cys	Cys	Thr	Val	Leu	His
		115					120					125			
Glu	Ile	Phe	Ile	Gln	Pro	Thr	Arg	Phe	Asn	Arg	Ser	Leu	Gly	Ser	Ser
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Ser	Arg	Leu	Leu	Cys	Leu	Phe	Lys	His							
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<210> 5611

<211> 1152

<212> DNA

<213> Homo sapiens

<400> 5611

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 180
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 480
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<210> 5612

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5612

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 35 40 45
 Trp Val Arg Asp Ser Cys Arg Lys Leu Ser Gly Leu Leu Arg Gln Lys
 50 55 60
 Asn Ala Val Leu Asn Lys Leu Lys Thr Ala Ile Gly Ala Val Glu Lys
 65 70 75 80
 Asp Val Gly Leu Ser Asp Glu Glu Lys Leu Phe Gln Val His Thr Phe

	85		90		95
Glu Ile Phe Gln Lys Glu Leu Asn Glu Ser Glu Asn Ser Val Phe Gln					
	100		105		110
Ala Val Tyr Gly Leu Gln Arg Ala Leu Gln Gly Asp Tyr Lys Asp Val					
	115		120		125
Val Asn Met Lys Glu Ser Ser Arg Gln Arg Leu Glu Ala Leu Arg Glu					
	130		135		140
Ala Ala Ile Lys Glu Glu Thr Glu Tyr Met Glu Leu Leu Ala Ala Glu					
	145		150		155
Lys His Gln Val Glu Ala Leu Lys Asn Met Gln His Gln Asn Gln Ser					
	165		170		175
Leu Ser Met Leu Asp Glu Ile Leu Glu Asp Val Arg Lys Ala Ala Asp					
	180		185		190
Arg Leu Glu Glu Glu Ile Glu Glu His Ala Phe Asp Asp Asn Lys Ser					
	195		200		205
Val Lys Gly Val Asn Phe Glu Ala Val Leu Arg Val Glu Glu Glu Glu					
	210		215		220
Ala Asn Ser Lys Gln Asn Ile Thr Lys Arg Glu Val Glu Asp Asp Leu					
	225		230		235
Val Leu Ser Met Leu Ile Asp Ser Gln Asn Asn Gln Tyr Ile Leu Thr					
	245		250		255
Lys Pro Arg Asp Ser Thr Ile Pro Arg Ala Asp His His Phe Ile Lys					
	260		265		270
Asp Ile Val Thr Ile Gly Met Leu Ser Leu Pro Cys Gly Trp Arg Cys					
	275		280		285
Thr					

<210> 5613
 <211> 1679
 <212> DNA
 <213> Homo sapiens

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 420
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 480
 aaaaaggaat gtgcggcaag aggagaagac tatgagaaa tgaagtgtct ggagatcagt
 540
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 720
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<211> 242

<212> PRT

<213> Homo sapiens

<400> 5614

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Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys

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Val	Lys	Leu	Leu	Glu	Ile	Ser	Ala	Glu	Asp	Ala	Glu	Arg	Trp	Glu	Arg
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Glu	Ile	Asp	Arg	Met	Val	Ile	Asp	Leu	Glu	Lys	Gln	Ile	Glu	Lys	Arg
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Asp	Lys	Tyr	Ser	Arg	Arg	Arg	Pro	Tyr	Asn	Asp	Asp	Ala	Asp	Ile	Asp
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Tyr	Ile	Asn	Glu	Arg	Asn	Ala	Lys	Phe	Asn	Lys	Lys	Ala	Glu	Arg	Phe
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Tyr	Gly	Lys	Tyr	Thr	Ala	Glu	Ile	Lys	Gln	Asn	Leu	Glu	Arg	Gly	Thr
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<210> 5615

<211> 1522

<212> DNA

<213> Homo sapiens

<400> 5615

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<210> 5616

<211> 507

<212> PRT

<213> Homo sapiens

<400> 5616

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Gln Gln Gln Gln Gln Gly Val Leu Pro Gln Thr Val Pro Ser Gln Pro
35 40 45
Ser Ser Ser Thr Val Pro Pro Pro His Arg Pro Leu Tyr Gln Pro
50 55 60
Met Gln Pro His Pro Gln His Leu Ala Ser Met Gly Phe Asp Pro Arg
65 70 75 80
Trp Leu Met Met Gln Ser Tyr Met Asp Pro Arg Met Met Ser Gly Arg
85 90 95
Pro Ala Met Asp Ile Pro Pro Ile His Pro Gly Met Ile Pro Pro Lys
100 105 110
Pro Leu Met Arg Arg Asp Gln Met Glu Gly Ser Pro Asn Ser Ser Glu
115 120 125
Ser Phe Glu His Ile Ala Arg Ser Ala Arg Asp His Ala Ile Ser Leu
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Pro Gln Gln Ala Thr Thr Pro Lys Ala Thr Glu Glu Pro Glu Asp Val

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Glu Ala Pro Asp Gln Lys Thr Leu Ser Thr Pro Gln Glu Glu Arg Ile
      245              250              255
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Pro Gln Ser Val Pro Pro Pro Ile Gln Pro Glu Ala Glu Lys Phe Pro
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Lys Pro Leu Glu Pro Val Ser Thr Val Gln Val Glu Pro Ala Val Lys
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<211> 3480

<212> DNA

<213> Homo sapiens

<400> 5617

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<211> 1003

<212> PRT

<213> Homo sapiens

<400> 5618

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			20					25					30		
Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Gln	Ile	Ser	Leu	Phe	Lys	Asn	Leu
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Leu	Lys	Lys	Lys	Gln	Asn	Glu	Val	Ser	Glu	Lys	Lys	Glu	Arg	Leu	Val
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Asn	Gly	Ile	Gln	Lys	Leu	Lys	Thr	Thr	Ala	Ser	Gln	Val	Gly	Asp	Leu
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Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
				85					90					95	
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
			100					105					110		
Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
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Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
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				165					170					175	
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Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
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Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
					215						220				
Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230					235					240
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
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Ala	Ala	Gly	Leu	Cys	Ala	Trp	Val	Ile	Asn	Ile	Ile	Lys	Phe	Tyr	Glu
			260				265						270		
Val	Tyr	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Ala	Gln	Ala	Asn
			275				280					285			
Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
			290			295					300				
Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
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Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
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Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe

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Cys Glu Arg Trp Pro Leu Val Ile Asp Pro Gln Gln Gln Gly Ile Lys
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Trp Ile Lys Asn Lys Tyr Gly Met Asp Leu Lys Val Thr His Leu Gly
      435      440      445
Gln Lys Gly Phe Leu Asn Ala Ile Glu Thr Ala Leu Ala Phe Gly Asp
      450      455      460
Val Ile Leu Ile Glu Asn Leu Glu Glu Thr Ile Asp Pro Val Leu Asp
465      470      475      480
Pro Leu Leu Gly Arg Asn Thr Ile Lys Lys Gly Lys Tyr Ile Arg Ile
      485      490      495
Gly Asp Lys Glu Cys Glu Phe Asn Lys Asn Phe Arg Leu Ile Leu His
      500      505      510
Thr Lys Leu Ala Asn Pro His Tyr Lys Pro Glu Leu Gln Ala Gln Thr
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Thr Leu Leu Asn Phe Thr Val Thr Glu Asp Gly Leu Glu Ala Gln Leu
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545      550      555      560
Leu Val Leu Thr Lys His Gln Asn Asp Phe Lys Ile Glu Leu Lys Tyr
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Leu Glu Asp Asp Leu Leu Leu Arg Leu Ser Ala Ala Glu Gly Ser Phe
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Leu Asp Asp Thr Lys Leu Val Glu Arg Leu Glu Ala Thr Lys Thr Thr
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Val Ala Glu Ile Glu His Lys Val Ile Glu Ala Lys Glu Asn Glu Arg
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Lys Ile Asn Glu Ala Arg Glu Cys Tyr Arg Pro Val Ala Ala Arg Ala
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Ser Leu Leu Tyr Phe Val Ile Asn Asp Leu Gln Lys Ile Asn Pro Leu
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Tyr Gln Phe Ser Leu Lys Ala Phe Asn Val Leu Phe His Arg Ala Ile
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Glu Gln Ala Asp Lys Val Glu Asp Met Gln Gly Arg Ile Ser Ile Leu
      675      680      685
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Phe Glu Lys Asp Lys Leu Thr Phe Leu Ser Gln Met Ala Phe Gln Ile
705      710      715      720
Leu Leu Arg Lys Lys Glu Ile Asp Pro Leu Glu Leu Asp Phe Leu Leu
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Arg Gly Ile Asp Arg Asp Val Glu Gly Ser Ala Lys Gln Trp Arg Lys

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 885 890 895
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<211> 1219

<212> DNA

<213> Homo sapiens

<400> 5619

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 720
 tcagcaatgt tcagagactg accttctatg gattctctat ggctctctca aagcaccgtg
 780
 gaatcaacca agccctcggg aagtcagagc taagcagcgg tcagcctctc ctgccgcaca
 840
 acacagggag cagctggcct ctgttagcaa cacggctcca gaggggaagg ggcataacca
 900
 tctctgcctt gacttcccag ggccggactc aatcccaggg agcaggaata tggcgacaaa
 960
 acatggctct tacacattcc catggtaggg gacagccctc cctgcctgca gcctgcccc
 1020
 aacatgaaac cacctcccca tagcagaagc gccagcccc tcctcagaga acccagctc
 1080
 tgctttgggg agcagcctgc aggtcgggca gacacaggac tatttactca gtgacgctag
 1140
 agattatata tcagagagac ctgaatccca ttataaaca aggcaaagggt gtgtctgcgg
 1200
 agaccttttt tccaagctg
 1219

<210> 5620

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5620

Met Leu Ser Pro Glu Arg Leu Ala Leu Pro Asp Tyr Glu Tyr Leu Ala
 1 5 10 15
 Gln Arg His Val Leu Thr Tyr Met Glu Asp Ala Val Cys Gln Leu Leu
 20 25 30
 Glu Asn Arg Glu Asp Ile Ser Gln Tyr Gly Ile Ala Arg Phe Phe Thr
 35 40 45
 Glu Tyr Phe Asn Ser Val Cys Gln Gly Thr His Ile Leu Phe Arg Glu
 50 55 60
 Phe Ser Phe Val Gln Ala Thr Pro His Asn Arg Val Ser Phe Leu Arg
 65 70 75 80
 Ala Phe Trp Arg Cys Phe Arg Thr Val Gly Lys Asn Gly Asp Leu Leu
 85 90 95
 Thr Met Lys Glu Tyr His Cys Leu Leu Gln Leu Leu Cys Pro Asp Phe
 100 105 110
 Pro Leu Glu Leu Thr Gln Lys Ala Ala Arg Ile Val Leu Met Asp Asp
 115 120 125
 Ala Met Asp Cys Leu Met Ser Phe Ser Asp Phe Leu Phe Ala Phe Gln
 130 135 140
 Ile Gln Phe Tyr Tyr Ser Glu Phe Leu Asp Ser Val Ala Ala Ile Tyr
 145 150 155 160
 Glu Asp Leu Leu Ser Gly Lys Asn Pro Asn Thr Val Ile Val Pro Thr
 165 170 175
 Ser Ser Ser Gly Gln His Arg Gln Arg Pro Ala Leu Gly Gly Ala Gly

```

      180              185              190
Thr Leu Glu Gly Val Glu Ala Ser Leu Phe Tyr Gln Cys Leu Glu Asn
      195              200              205
Leu Cys Asp Arg His Lys Tyr Ser Cys Pro Pro Pro Ala Leu Val Lys
      210              215              220
Glu Ala Leu Ser Asn Val Gln Arg Leu Thr Phe Tyr Gly Phe Leu Met
      225              230              235              240
Ala Leu Ser Lys His Arg Gly Ile Asn Gln Ala Leu Gly Lys Ser Glu
      245              250              255
Leu Ser Ser Arg Gln Pro Leu Leu Pro His Asn Thr Gly Ser Ser Trp
      260              265              270
Pro Leu Leu Ala Thr Arg Leu Gln Arg Gly Arg Gly Ile Thr Ile Ser
      275              280              285
Ala Leu Thr Ser Gln Gly Arg Thr Gln Ser Gln Gly Ala Gly Ile Trp
      290              295              300
Arg Gln Asn Met Ala Leu Thr His Ser His Gly Arg Gly Gln Pro Ser
      305              310              315              320
Leu Pro Ala Ala Leu Pro Gln His Glu Thr Thr Ser Pro
      325              330

```

<210> 5621

<211> 456

<212> DNA

<213> Homo sapiens

<400> 5621

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tttttgtgaa atagaattta ttgtggctct gattatgtac acgtgagatg gcctggctgg
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gccggcgccggg ctcacatggt ttgtacaata aatacatctg tggggcgggc tctccgcagc
120
cggggaagggc caccgccacg gttcagtcga gcttcggggc tcccagcttc atggggccct
180
tgccacacct cctctcgggc cgtttggcct ccattctccc ccgccgtcc tcgcgttct
240
tccgggcccag ctcagccttg acctgtcctg ggtgtcggga cgtgcagaca gggtagcgaa
300
ggggctcgccc ttgtcgcttg actctgggcc accccagtta tactcgctgg ccagccgtgt
360
accgtcagga ggtggctcct gggagcttgg ctgaaccctg ggcggtggcc cttcccggct
420
gcggagagcc cgccccacag atgtatttat tgtaca
456

```

<210> 5622

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5622

```

Met Ala Trp Leu Gly Arg Pro Gly Ser His Gly Leu Tyr Asn Lys Tyr
1      5      10      15
Ile Cys Gly Ala Gly Ser Pro Gln Pro Gly Arg Ala Thr Ala Thr Val
20      25      30
Gln Ser Ser Phe Arg Ala Pro Ser Phe Met Gly Pro Leu Ala Thr Phe

```

```

          35              40              45
Leu Ser Ala Arg Leu Ala Ser Ile Ser Arg Arg Arg Ser Ser Arg Phe
          50              55              60
Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
65              70              75              80
Thr Gly

```

<210> 5623
 <211> 357
 <212> DNA
 <213> Homo sapiens

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<400> 5623
nctggaagaa ctcgtcatgc tctttgtagc gtggtgcttc tgttgcacac aggacaactt
60
gcctttgatg attttcaaga gaggttgtct atgatgtggc aaaagtatgc aggaagcagg
120
cggtcaatgc ctctgggagc aaggatcctt ttccacggtg tgttctatgc cgggggcttt
180
gccattgtgt attacctcat tcaaaagttt cattccaggg ctttatatta caagttggca
240
gtggagcagc tgcagagcca tcccgaggca caggaagctc tgggccctcc tctcaacatc
300
cattatctca agctcatcga cagggaanaac ttcgtggaca ttgttgatgc caagttg
357

```

<210> 5624
 <211> 88
 <212> PRT
 <213> Homo sapiens

```

<400> 5624
Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly Ala
1          5          10          15
Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
          20          25          30
Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
          35          40          45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
          50          55          60
Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
65          70          75          80
Val Asp Ile Val Asp Ala Lys Leu
          85

```

<210> 5625
 <211> 1017
 <212> DNA
 <213> Homo sapiens

```

<400> 5625
gccgactcgt ggtacctggc gcttctgggc ttcgtgagc acttccgcac ttccagcccg
60

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```

cccaaaatcc gcctgtgcgt gcactgcctg caggccgtgt tccccctcaa gccgccgacg
120
cgcatcgagg cccgtacaca cctgcagctg ggctccgttc tctatcacca caccaagaac
180
agcgagcagg cgcgcagcca cctggagaag gcgtgggtga tatcacagca aatccccacg
240
ttcgaagatg ttaaatattg agcagcaagt ctgttgtctg aattgtactg tcaagagaat
300
tccgttgatg cagcaaagcc gctgctgcgg aaggcgatcc agatctcaca gcagacccca
360
tattggcact gccgctgct cttccagctc gctcaactgc acacgcttga gaaggacctg
420
gtgtcggcct gtgacctcct ggggtgtaggg gccgagtagg cccgggtggg gggatctgaa
480
tacacacggg cgctgttcct cctcagcaag gggatgtctg tgctgatgga gcgaaagctg
540
caggaggtgc acccgctgct gaccctctgc gggcagatcg tggagaactg gcaggggaac
600
cccattcaga aggagtcgct gcgtgtcttc ttctgggtgc tccagggtcac ccactatctg
660
gatgccgggc aggtgaagag cgtgaagccg tgtctgaagc agctgcagca gtgcatccag
720
accatctcca cactgcacga tgatgagatc ctgccacga accccgctga cctcttccac
780
tggctgcccc aggagcacat gtgtgtgctt gtctacctgg tgactgtgat gcaatccatg
840
caggccggct acctggagaa ggcgcagaag tacacggaca aggccctcat gcagctggag
900
aagctcaaga tgctggactg cagccccatc ctgtcatcct tccaagtgat cctgctggag
960
cacatcatca tgtgccgcct gtgcacgggt cacaaggcca cggcgctgca ggagatc
1017

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<210> 5626

<211> 339

<212> PRT

<213> Homo sapiens

<400> 5626

```

Ala Asp Ser Trp Tyr Leu Ala Leu Leu Gly Phe Ala Glu His Phe Arg
 1           5           10          15
Thr Ser Ser Pro Pro Lys Ile Arg Leu Cys Val His Cys Leu Glu Ala
 20          25          30
Val Phe Pro Phe Lys Pro Pro Gln Arg Ile Glu Ala Arg Thr His Leu
 35          40          45
Gln Leu Gly Ser Val Leu Tyr His His Thr Lys Asn Ser Glu Gln Ala
 50          55          60
Arg Ser His Leu Glu Lys Ala Trp Leu Ile Ser Gln Gln Ile Pro Gln
 65          70          75          80
Phe Glu Asp Val Lys Phe Glu Ala Ala Ser Leu Leu Ser Glu Leu Tyr
 85          90          95
Cys Gln Glu Asn Ser Val Asp Ala Ala Lys Pro Leu Leu Arg Lys Ala
100         105         110
Ile Gln Ile Ser Gln Gln Thr Pro Tyr Trp His Cys Arg Leu Leu Phe

```

```

      115              120              125
Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys
130              135              140
Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu
145              150              155              160
Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met
      165              170              175
Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln
      180              185              190
Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg
      195              200              205
Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln
      210              215              220
Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln
225              230              235              240
Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala
      245              250              255
Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr
      260              265              270
Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala
      275              280              285
Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met
      290              295              300
Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu
305              310              315              320
His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu
      325              330              335
Gln Glu Ile

```

<210> 5627

<211> 1401

<212> DNA

<213> Homo sapiens

<400> 5627

```

nctctcacac tgtggaattc tctctatcag cctcaaagtc cagatttggg aagggagtct
60
cagcgaggagg cagcagctgg cccaaccagg aggcagagcg gcaactgaac tctagccgga
120
aagagccagg gttatgtgca catgggagggt ggggaggaca ggggctgtat gtgacctca
180
catctgttcc tcgcgccccca gatggcttct gctgcctgct ccatggaccg catcgacagc
240
tttgagctcc tggatctcct gtttgaccgg caggacggca tcttgagaca cgtggagctg
300
ggcgagggct ggggtcacgt caaggaccag gtccctgccaa accccgactc tgacgacttc
360
ctcagctcca tcttgggctc tggagactca ctgccagct cccactctgt gtccccgaa
420
ggcagtgata gtggcatctc cgaagacctc ccctccgacc cccaggacac ccctccacgc
480
agcggaccag ccacctcccc cgccggctgc catcctgccc agcctggcaa ggggccctgc
540

```

ctctcctatc atcctggcaa ctcttgctcc accacaaccc caggggccagt gatccaacaa
 600
 cagcatcacc tgggggctc ctacctcctg cgacctgggg ctggggcactg tcaggagctg
 660
 gtgctcaccg aggatgagaa gaagctgctg gctaaagaag gcatcacctc gccactcag
 720
 ctgccccctca ctaagtacga ggagcgagt ctgaaaaaaa tccgccggaa aatccggaac
 780
 aagcagtcgg cgcaagaaag caggaagaag aagaaggaat atatcgatgg cctggagact
 840
 cggtcctgtt gctgtccttt gccctcatca tctctccctc catcagccct tttggcccca
 900
 acaaaaccga gagccctggg gactttgctg ctgtacgagt gttctccaga actttgcaca
 960
 acgatgctgc ctcccgctg gctgctgatg ctgtgccagg ctccgaggcc ccaggaccgc
 1020
 gacccgaggc tgacacaacc cgagaagagt ctccaggaag ccccggggca gactggggct
 1080
 tccaggacac cgcaacctg accaattcga cggaggagct ggacaacgcc accctgggtc
 1140
 tgagggaatgc aacagagggg ctggggccagg tcgccctgct ggactgggtg ggcctggggc
 1200
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 1260
 caggactatg ctcccgaggc cctctgccca ggggtgcctt ggggatgctg cactgggcag
 1320
 ctaccacact ggggatggga cgtgaggcca agacccagc agagatgcca gaatggggga
 1380
 ggcacagctc atagccacac a
 1401

<210> 5628

<211> 299

<212> PRT

<213> Homo sapiens

<400> 5628

Met	Ala	Ser	Ala	Ala	Cys	Ser	Met	Asp	Pro	Ile	Asp	Ser	Phe	Glu	Leu
1			5						10					15	
Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
		20						25					30		
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
		35				40					45				
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
50				55							60				
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65				70					75				80		
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85						90				95		
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
		100					105					110			
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
		115					120					125			
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

```

      130              135              140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys
145              150              155              160
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu
      165              170              175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg
      180              185              190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile
      195              200              205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser
      210              215              220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly
225              230              235              240
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu
      245              250              255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp
      260              265              270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro
      275              280              285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr
      290              295

```

<210> 5629

<211> 428

<212> DNA

<213> Homo sapiens

<400> 5629

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gtgcacgacc ccaactgaatc atcccacaac catggatggg agacacactc agtctccttt
60
aacagaagat aaagctggggg cttacagaga atgtacaact tggcccaggg cacaccagtt
120
agccatcagg ggcagngctg ctattcaggt ctgggactgt gggactccag agcccatgtt
180
ttttacgagg atgccatact gccacaatgg atggtgtctt tatctctcga tatatgattg
240
tgtgttggga ggcgtggggg ggcagctgga agaattggaga ggcataattg tggaggatct
300
tccccattc tctgtaccc tctcttggag ctcccagttc catctgagaa attatctact
360
ctgagaaatc gtcacaacac agcatggttg tgagtgcagt ggcagaagcc tgtgcttggt
420
tgtatggg
428

```

<210> 5630

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5630

```

Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly
1          5          10          15
Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

```


1	5	10	15
Ala Gly Ala Gly Ala Gly His Leu Thr Pro Gln Ala Ser Pro Thr Ser			
	20	25	30
Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val			
	35	40	45
Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg			
	50	55	60
Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Pro Thr Ser Ser Ser			
	65	70	75
Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro			
	85	90	95
Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys			
	100	105	110
Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr			
	115	120	125
Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser			
	130	135	140
Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser			
	145	150	155
Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln			
	165	170	175
Glu Arg Thr His Thr Thr Val			
180			

<210> 5633

<211> 2181

<212> DNA

<213> Homo sapiens

<400> 5633

gccaatgtcc ctgtggccac tcagctgaga ccgaggcgca cctgggcagc tgcgggtgtc
 60
 tgtcaactcc gtgtcccaca tagatgccag gctctgcttc tgtggttctg gaggtcatta
 120
 gtcaattgta tgtggtgctg tctgtcctcc tgattgcaga ggaggaagga accccttaaa
 180
 tgagcgggtt ctgagtgtcg gggccgctgg tctgctctgc ctggtgggat tctccagtgc
 240
 tggcttcac tgtgccccag cccactctc accaacaagg agggcgtaga aatgacaagg
 300
 aatccatccc tagagttcac aggagatcta gggcagagtt tccaagctgc agctgctctg
 360
 gccctgtgtg agctgtgtct ctgaggaagc cccaggctga ggtagctacc aggcggaggc
 420
 tgggtttgga ggcctccaca tcaggaatt gagcggtagg ggtttcagcc ttcacgttgg
 480
 tcgcgcact gtatgggaag tggggtctgg ggtctgcttg cccagtctca ccgtcctctt
 540
 cctcccaaa gccgcctgga taaggggctg gccgcactgg tcggggagcg tggcgcggat
 600
 ctggtgtgtc tcgagggcat gggccgtgct gtccacacaa actaccacgc agccctgcgc
 660
 tgcgagagcc tcaagctggc cgatcatcaag aacgcgtggc tggccgagcg gctgggcggc
 720

cggtctttca ggcctatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc
780
ggactcttct gcttgtcact tgtccgagtg gcttcagaga ttaaaggggc cccctcataa
840
atgtgcctta attttcgag ataacagggg gaatagacat ctttttggga gtcttccccct
900
ttgtcaggga gctactcctt agaggagacag aggtcatcct ggctgcaaac tcaggccccg
960
ccctgaacga cgtgaccac agcagagtcct tcactgtggc agagcgtatt gcgggacatg
1020
accctgaccg tgcgcagcct gctggacacc agggagcact gtctgaacga gttcaacttc
1080
ccggatccct actccaaagt gaagcagcgg gagaatggcg tggcgctgag gtgcttcccc
1140
ggggtcgtgc gctccctgga cgcgctgggc tgggaggaac ggagctggc gctggtgaaa
1200
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1260
tccgaccctt actttgggtt tgaagaagca aagaggaagt tacaagaag accctggctc
1320
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1380
attttcgag ataacagtgg aatagacatc attttggag tcttccccct tgtcaggag
1440
ctactcctta gagggacaga ggtcatcctg gcgtgcaact caggccccgc cctgaacgac
1500
gtgaccaca cgcagtcctt catcgtggca gagcgtattg cgggcatgga cctgtcgtg
1560
cactctgcgc tccaggaaga gaggtgctg ctggtgcaga cgggctccag ctccccgtgc
1620
ctcgacctca gccgcctgga taaggggctg gccgcactgg tgcgggagcg tggcgcgat
1680
ctggtgggtca tcgagggcat gggccgtgct gtccacacaa actaccacgc agccctgcgc
1740
tgcgagagcc tcaagctggc cgtcatcaag aacgcgtggc tggccgagcg gctggggcggc
1800
cggtctttca gcgtcatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc
1860
ggactcttct gcttgtcact tgtcaggaat gtgtttttac caccacaggg aaactgcgtt
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1980
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2040
tttaactgct aaagaacctt ttatatatat atatatat aaatagagag atctatacag
2100
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2160
aaaaaactct atttgggtgc t
2181

<210> 5634

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5634

```

Pro Thr Ala Ser Pro Ser Ser Trp Gln Ser Val Leu Arg Ala Trp Thr
1          5          10          15
Leu Thr Val Arg Ser Leu Leu Asp Thr Arg Glu His Cys Leu Asn Glu
          20          25          30
Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
          35          40          45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
          50          55          60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
65          70          75          80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
          85          90          95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
          100          105          110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
          115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
          130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
          165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
          180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
          195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
          210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
          245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
          260          265          270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
          275          280          285
Glu

```

<210> 5635

<211> 614

<212> DNA

<213> Homo sapiens

<400> 5635

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nntgtgaaag atgtgtgcaga agtgttccag aagtggtcga agatagaagg aaaaaagtgc
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cactgcctat cagaaaaaac aaaacaaaac atgggaaata caaccaccaa attccgtaaa
120
gcactcatca atgggtgatga aaacctggcc tgccaaatat atgaaaaaaa tcctcagcta
180

```


aaagaatctc ttgatccaaa tacatcttat ggggagccct accagcacia tactccatta
 240
 cattatgctg ctagacatgg aatgaataaa atattaggag atgatttcag aagagcagat
 300
 tgtctgcaga tgatcttaaa atggaaagga gcaaaacttg accaggggtga atatgagaga
 360
 gcagctattg atgctgttga taacaaaaaa aacacaccct tgcactatgc tgctgcctca
 420
 gggatgaaag cctgtgtaga aaaacatgga ggagacttgt ttgctgagaa tgaaaataaa
 480
 gatactcctt gtgattgtgc tgaaaagcaa caccacaaag atttgccctt caatctggaa
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 614

<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

Xaa	Val	Lys	Asp	Val	Ala	Glu	Val	Phe	Gln	Lys	Trp	Leu	Lys	Ile	Glu
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Gly	Lys	Lys	Cys	His	Cys	Leu	Ser	Glu	Lys	Thr	Lys	Gln	Asn	Met	Gly
			20					25					30		
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn
			35				40					45			
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu
			50				55				60				
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu
65				70						75				80	
His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe
				85					90					95	
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys
			100					105					110		
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn
			115				120					125			
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala
			130				135				140				
Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys
145				150						155				160	
Asp	Thr	Pro	Cys	Asp	Cys	Ala	Glu	Lys	Gln	His	His	Lys	Asp	Leu	Ala
				165					170					175	
Leu	Asn	Leu	Glu	Ser	Gln	Met	Val	Phe	Ser	Arg	Asp	Pro	Glu	Ala	Glu
			180					185					190		
Glu	Ile	Glu	Ala	Glu	Tyr	Ala	Ala	Leu	Asp	Lys	Arg				
			195				200								

<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens

<400> 5637
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 120
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 180
 aaggcccggtt ttgaggaag tggaggctcc caggagaaag gcagtggctg tgatcgacac
 240
 gccagggctc tgccctgcac tgccctggac cagcaggctg cccaccccag acaggtggga
 300
 cccctttccc gcacgcagac tctgagcagc agcttcttgt gacccccacc gcgtcctgct
 360
 cctcaggctc atgccttcgc ggaacagaag ccaagaccgc gtgaaaaac caaggtgttt
 420
 aaatataaat aagagcgatt cccacagccc cacggtgctg gccagcctca caggtgcccc
 480
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 540
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 600
 aggtcccaag gaggcccagc cccggccagc ctgtgtggac cccgcgggcc tgcgcgcccc
 660
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 720
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 825

<210> 5638

<211> 132

<212> PRT

<213> Homo sapiens

<400> 5638

Met	Pro	Cys	Gly	Asn	Arg	Ser	Gln	Asp	Pro	Val	Glu	Asn	Pro	Arg	Cys
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Leu	Asn	Ile	Asn	Lys	Ser	Asp	Ser	His	Ser	Pro	Thr	Val	Leu	Ala	Ser
			20					25					30		
Leu	Thr	Gly	Ala	Arg	Trp	Phe	Cys	Asp	Pro	Ser	Gln	Ala	His	Ala	Pro
		35					40					45			
Leu	Ala	Gly	Arg	Leu	Ala	Arg	Ala	Pro	Leu	Trp	Leu	Ala	Cys	Gly	Asp
		50				55					60				
Thr	Trp	Ala	Leu	Leu	His	Val	Pro	Thr	Arg	Ala	Val	Ala	Gly	Ser	Lys
		65				70				75				80	
Glu	Ala	Gln	Pro	Arg	Pro	Ala	Cys	Val	Asp	Pro	Ala	Gly	Leu	Arg	Ala
			85						90				95		
Pro	Glu	Leu	Leu	Thr	Val	Ser	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Arg	Arg
			100					105					110		
Pro	Pro	Ser	Ser	Cys	Pro	Ala	Trp	Asp	Pro	Ser	Ala	Val	Cys	Leu	Leu
			115				120					125			
Asn	Gln	Gly	Val												

130

<210> 5639

<211> 2433

<212> DNA

<213> Homo sapiens

<400> 5639

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120
atttgacatt tcttcttcca catccagtgt atctgacatt tagcgacat ttgatttgca
180
ctcacccact ttgaggagct caattgccgc ttaagtcctg ggctagtggc tgccctaaag
240
ttcagcacgc ccacggagct ttgggtccac cggactgta aaaaggaagc acttccgtta
300
gcatgacccg gcctgaagta gcggcggaac ggaagtcgct tgtgtatgaa cgcagcggcg
360
gacctgtgag gggatccgac ttgccggcag aacttacgct gcgggacccc gggcactgtt
420
gctgctgcgg gagactgtgg gctgtttagt gccatgcacc ctttacagtg tgcctccaa
480
gtgcagaggt ctctggggtg gggaccattg gcctctgtgt cttggctgtc gctgaggatg
540
tgacagggc acagcagctc ctctagtacc atgtgtccca gtccagagag gcaggaggat
600
ggagctcgga aggatttcag ctccaggctg gctgctggac cgacttttca acatttttta
660
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720
ctcatgatgg atgaacttct tggaaggcag agaaaagtct acctcgagac ctatggctgc
780
cagatgaatg tgaatgacac agagatagcc tgggtccatct tacagaagag tggctacctg
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900
gctgagcaga ccatctggaa ccgtttacat cagcttaaac ccttgaagac aaggcgcc
960
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1020
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1080
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1140
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1260
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1320
gagcaggggc tgaagaagt gacacttctt ggtcagaatg ttaatagttt tcgggacaa
1380

tcggagggtcc agttcaacag tgcagtgcc accaatctca gtctgggtt taccaccaac
 1440
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 1500
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 1620
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 1680
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 1740
 ggcttttgtg gtgagacgga ggaagatcac gtccagacag tctctttgct ccgggaagtt
 1800
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 1860
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 1920
 atcttcagag aagaagcaac aaaagccaat cagacctctg tgggctgtac ccagttggtg
 1980
 ctagtggaa ggtcagtaa acgctctgcc actgacctgt gtggcaggaa tgatggaaac
 2040
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 2100
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 2160
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 2280
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 2340
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 2400
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 2433

<210> 5640

<211> 540

<212> PRT

<213> Homo sapiens

<400> 5640

Met	Cys	Pro	Ser	Pro	Glu	Arg	Gln	Glu	Asp	Gly	Ala	Arg	Lys	Asp	Phe
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Ser	Ser	Arg	Leu	Ala	Ala	Gly	Pro	Thr	Phe	Gln	His	Phe	Leu	Lys	Ser
			20					25					30		
Ala	Ser	Ala	Pro	Gln	Glu	Lys	Leu	Ser	Ser	Glu	Val	Glu	Asp	Pro	Pro
			35				40					45			
Pro	Tyr	Leu	Met	Met	Asp	Glu	Leu	Leu	Gly	Arg	Gln	Arg	Lys	Val	Tyr
			50			55					60				
Leu	Glu	Thr	Tyr	Gly	Cys	Gln	Met	Asn	Val	Asn	Asp	Thr	Glu	Ile	Ala
					70					75				80	
Trp	Ser	Ile	Leu	Gln	Lys	Ser	Gly	Tyr	Leu	Arg	Pro	Val	Thr	Ser	Lys

	85		90		95
Ala Asp Val Ile	Leu Leu Val Thr Cys Ser Ile Arg Glu Lys Ala Glu				
	100		105		110
Gln Thr Ile Trp	Asn Arg Leu His Gln Leu Lys Ala Leu Lys Thr Arg				
	115		120		125
Arg Pro Arg Ser	Arg Val Pro Leu Arg Ile Gly Ile Leu Gly Cys Met				
	130		135		140
Ala Glu Arg Leu	Lys Glu Glu Ile Leu Asn Arg Glu Lys Met Val Asp				
	145		150		155
Ile Leu Ala Gly	Pro Asp Ala Tyr Arg Asp Leu Pro Arg Leu Leu Ala				
	165		170		175
Val Ala Glu Ser	Gly Gln Gln Ala Ala Asn Val Leu Leu Ser Leu Asp				
	180		185		190
Glu Thr Tyr Ala	Asp Val Met Pro Val Gln Thr Ser Ala Ser Ala Thr				
	195		200		205
Ser Ala Phe Val	Ser Ile Met Arg Gly Cys Asp Asn Met Cys Ser Tyr				
	210		215		220
Cys Ile Val Pro	Phe Thr Arg Gly Arg Glu Arg Ser Arg Pro Ile Ala				
	225		230		235
Ser Ile Leu Glu	Glu Val Lys Lys Leu Ser Glu Gln Gly Leu Lys Glu				
	245		250		255
Val Thr Leu Leu	Gly Gln Asn Val Asn Ser Phe Arg Asp Asn Ser Glu				
	260		265		270
Val Gln Phe Asn	Ser Ala Val Pro Thr Asn Leu Ser Arg Gly Phe Thr				
	275		280		285
Thr Asn Tyr Lys	Thr Lys Gln Gly Gly Leu Arg Phe Ala His Leu Leu				
	290		295		300
Asp Gln Val Ser	Arg Val Asp Pro Glu Met Arg Ile Arg Phe Thr Ser				
	305		310		315
Pro His Pro Lys	Asp Phe Pro Asp Glu Val Leu Gln Leu Ile His Glu				
	325		330		335
Arg Asp Asn Ile	Cys Lys Gln Ile His Leu Pro Ala Gln Ser Gly Ser				
	340		345		350
Ser Arg Val Leu	Glu Ala Met Arg Arg Gly Tyr Ser Arg Glu Ala Tyr				
	355		360		365
Val Glu Leu Val	His His Ile Arg Glu Ser Ile Pro Gly Val Ser Leu				
	370		375		380
Ser Ser Asp Phe	Ile Ala Gly Phe Cys Gly Glu Thr Glu Glu Asp His				
	385		390		395
Val Gln Thr Val	Ser Leu Leu Arg Glu Val Gln Tyr Asn Met Gly Phe				
	405		410		415
Leu Phe Ala Tyr	Ser Met Arg Gln Lys Thr Arg Ala Tyr His Arg Leu				
	420		425		430
Lys Asp Asp Val	Pro Glu Glu Val Lys Leu Arg Arg Leu Glu Glu Leu				
	435		440		445
Ile Thr Ile Phe	Arg Glu Glu Ala Thr Lys Ala Asn Gln Thr Ser Val				
	450		455		460
Gly Cys Thr Gln	Leu Val Leu Val Glu Gly Leu Ser Lys Arg Ser Ala				
	465		470		475
Thr Asp Leu Cys	Gly Arg Asn Asp Gly Asn Leu Lys Val Ile Phe Pro				
	485		490		495
Asp Ala Glu Met	Glu Asp Val Asn Asn Pro Gly Leu Arg Val Arg Ala				
	500		505		510
Gln Pro Gly Asp	Tyr Val Leu Val Lys Ile Thr Xaa Gln Pro Val Leu				

515 520 525

Arg His Leu Gly Asp Met Phe Ser Ala Gly Pro Leu
530 535 540

<210> 5641
<211> 293
<212> DNA
<213> Homo sapiens

<400> 5641
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ttctgtggcc acgcgtccaa aaccaatcag gtcaactcgg gcgggtgtgt gctgagggtg
120
cagggtggcg aggagggtgt gctggctggg gcacccctgg catccctgga gagccagggtg
180
aggagggcag atacaagcag aaattccagt cagtgttcac ggctcaactcgg cagacccacc
240
agccccctgc acccaacagc ctgatcatag tcaacgcggg cctcaccaac ccg
293

<210> 5642
<211> 87
<212> PRT
<213> Homo sapiens

<400> 5642
Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val
1 5 10 15
Lys Val Val Thr Phe Cys Gly His Ala Ser Lys Thr Asn Gln Val Asn
20 25 30
Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu
35 40 45
Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp
50 55 60
Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr
65 70 75 80
Ser Pro Leu His Pro Thr Ala
85

<210> 5643
<211> 1218
<212> DNA
<213> Homo sapiens

<400> 5643
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caaaataaca tggcagccag acgaattaca caggagactt ttgatgtgtg attacaagaa
120
aaagcccaaac gatatccatc ggatgccagt ggtgaggctg taagcgaaac tcttcagttt
180
aaagctcaag atctcttaag ggcagtccca agatccagag cagagatgta tgatgacgtc
240

cacagcgatg gcagatactc cctcagtgga tctgtagctc actctagaga tgccggaaga
 300
 gaagcgctga gaagtgcagt atttccaggg ccttccttca gatcaagcaa cccctccatc
 360
 agtgatgaca gctactttcg caaagaatgt ggcggggatc tggaattttc tcactctgat
 420
 tctcgggacc aggtcattgg ccaccggaat ttggggcatt tccgttttca ggactggaaa
 480
 ttgctgctcc gtggttcttg ggaacaagac ttggccatc cagtttttca agagtctctt
 540
 tgggtcacagg agtatagttt tggtcctctc gcagttttgg gggactttgg atcttccagg
 600
 ctgattgaga aagagtgttt ggagaaggag agtcgggatt atgacgtgga ccatcctggg
 660
 gaggtgact ctgtgcttag gggcagcagt caagtccagg ccagaggtcg agctctaaac
 720
 atcgttgacc aggaaggttc cctcctagga aagggggaga ctcagggcct gctcacagct
 780
 aaggggggtg ttgggaaact tgtcacattg agaaatgtga gcacaaaaaa aatacccacc
 840
 gtgaatcgta ttactcccaa aactcagggc actaacaaa tccagaaaaa cactccaagt
 900
 cctgatgtga ccttggggac aaaccaggg acagaagata tccagttccc cattcagaag
 960
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 1080
 ttccacacca taaaattaga ttattaaatt tttcccaaac ttttccagac tctctttgaa
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 1200
 cacagagatt tttgcttt
 1218

<210> 5644

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5644

Trp	Glu	Gln	Asp	Phe	Gly	His	Pro	Val	Ser	Gln	Glu	Ser	Ser	Trp	Ser
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Gln	Glu	Tyr	Ser	Phe	Gly	Pro	Ser	Ala	Val	Leu	Gly	Asp	Phe	Gly	Ser
			20					25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
		35					40					45			
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
		50				55					60				
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65					70				75					80	
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
				85					90				95		
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile

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          100              105              110
Pro Thr Val Asn Arg Ile Thr Pro Lys Thr Gln Gly Thr Asn Gln Ile
          115              120              125
Gln Lys Asn Thr Pro Ser Pro Asp Val Thr Leu Gly Thr Asn Pro Gly
          130              135              140
Thr Glu Asp Ile Gln Phe Pro Ile Gln Lys Ile Pro Leu Gly Leu Asp
          145              150              155              160
Leu Lys Asn Leu Arg Leu Pro Arg Arg Lys Met Ser Phe Asp Ile Ile
          165              170              175
Asp Lys Ser Asp Val Phe Ser Arg Phe Gly Ile Glu Ile Ile Lys Trp
          180              185              190
Ala Gly Phe His Thr Ile Lys Leu Asp Tyr
          195              200

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<210> 5645
 <211> 156
 <212> DNA
 <213> Homo sapiens

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<400> 5645
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cctcagatca gtttcccctc tcccaggcaa gaggacacga gcaactggcaa gttcacctgc
120
aaagtccccg gctctacta ctttgtctac caccg
156

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<210> 5646
 <211> 52
 <212> PRT
 <213> Homo sapiens

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<400> 5646
Pro Arg Pro Ser Arg Arg Arg Asn Cys Arg Trp Ala Val Phe Gly Leu
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Ala Gln Arg Cys Pro Gln Ile Ser Phe Pro Ser Pro Arg Gln Glu Asp
20     25     30
Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr Phe
35     40     45
Val Tyr His Ala
50

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<210> 5647
 <211> 150
 <212> DNA
 <213> Homo sapiens

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<400> 5647
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aggcccaagg gggagccagg aatcccagcc attcccggga tccgaggacc caaagggcag
120
aaggggagaac ccggttacc cgcccatccn
150

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<210> 5648
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 5648
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 20 25 30
 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly
 35 40 45
 His Pro
 50

<210> 5649
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 5649
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 120
 gaccgagtc tccggcgag cgcggggcgc ttgctccgct cgcaggtcat ccacagcggg
 180
 cacttcattg tgctgctgcc gcacagcgac tcgctgcccc ggcggcgcgca ccaggagggt
 240
 ccgtggggcc ctccgacttc gggccgcgca gtatcgaccc cacactcaca cgcctcttcg
 300
 agtgcttgag cctggcctac agtggcaagc tggggctctcc caagt
 345

<210> 5650
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 5650
 Met Ala Val Ala Ala Ala Thr Ala Trp Ser Leu Gly Ser Arg Pro Ala
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 Gln Thr Arg Thr Arg Thr Gln Thr Arg Thr Arg Val Ser Gly Ala
 20 25 30
 Ala Arg Ala Ala Cys Ser Ala Arg Arg Ser Ser Thr Ala Val Thr Ser
 35 40 45
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg
 50 55 60
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His
 65 70 75 80
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala
 85 90 95
 Gly Val Ser Gln

100

<210> 5651
 <211> 615
 <212> DNA
 <213> Homo sapiens

<400> 5651
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 60
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 120
 ctgcgccatga agagccgctt tagcaccatt gacctccgc cgtactcgc ggagctgaat
 180
 gctagcttgc taggaatgag agtaaacaat gtttatgatg tggataataa gacatacctt
 240
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 300
 catacaacag aatttgagtgc gcctaagaat atgatgcgct ctagttttgc catgaagtgc
 360
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 420
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 480
 agggggaaca ttgttcttac agattatgag tacgtaattt taaatattct aaggtttcga
 540
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 600
 agagctgctg aacct
 615

<210> 5652
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 5652
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 Leu Asn Ala Ser Leu Leu Gly Met Arg Val Asn Asn Val Tyr Asp Val
 20 25 30
 Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala
 35 40 45
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu
 50 55 60
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys
 65 70 75 80
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp
 85 90 95
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 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu
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 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

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<400> 5654
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<212> PRT

<213> Homo sapiens

<400> 5656

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 Leu Lys Arg Ile Leu Ala Lys Val Gln Glu Met Arg Asp Gln Arg Val
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 Ala Ser Leu Val Thr Thr Asp His Ser Glu Met Lys Lys Leu Phe Glu
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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660
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720
tttaattgtc gcattgaata tgaaaagggt gacaaggcta ccaagaacac actctgcaac
780
tatgaccctt caaaaacctg ttaccaggag caaacccaaa gtcatgtatc ctggctctgc
840

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tccaagccct ttaaggtgat ctgtatttac atttcctttt atagtagaca ttataaactg
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 960
 tgaaggtgaa catgggggtg agactgaagc ctgaggaatt aaaggtcata tgacaggggt
 1020
 gttacctcaa agaagaaggt cacatctgtt gcctggaatg tgtctacact gctgctcttg
 1080
 tcaactgggt gccaaaaata ctagtggaaa acactctgat gtaatttctg cccagtcagc
 1140
 ttcattccctc agtataattg taaatcatca cagattttga attcacacct gaagacatgc
 1200
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 att
 1263

<210> 5660

<211> 253

<212> PRT

<213> Homo sapiens

<400> 5660

Val Thr Cys Ala Asn Leu Thr Asn Gly Gly Lys Ser Glu Leu Leu Lys
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 Ser Gly Ser Ser Lys Ser Thr Leu Lys His Ile Trp Thr Glu Ser Ser
 20 25 30
 Lys Asp Leu Ser Ile Ser Arg Leu Leu Ser Gln Thr Phe Arg Gly Lys
 35 40 45
 Glu Asn Asp Thr Asp Leu Asp Leu Arg Tyr Asp Thr Pro Glu Pro Tyr
 50 55 60
 Ser Glu Gln Asp Leu Trp Asp Trp Leu Arg Asn Ser Thr Asp Leu Gln
 65 70 75 80
 Glu Pro Arg Pro Arg Ala Lys Arg Arg Pro Ile Val Lys Thr Gly Lys
 85 90 95
 Phe Lys Lys Met Phe Gly Trp Gly Asp Phe His Ser Asn Ile Lys Thr
 100 105 110
 Val Lys Leu Asn Leu Leu Ile Thr Gly Lys Ile Val Asp His Gly Asn
 115 120 125
 Gly Thr Phe Ser Val Tyr Phe Arg His Asn Ser Thr Gly Gln Gly Asn
 130 135 140
 Val Ser Val Ser Leu Val Pro Pro Thr Lys Ile Val Glu Phe Asp Leu
 145 150 155 160
 Ala Gln Gln Thr Val Ile Asp Ala Lys Asp Ser Lys Ser Phe Asn Cys
 165 170 175
 Arg Ile Glu Tyr Glu Lys Val Asp Lys Ala Thr Lys Asn Thr Leu Cys
 180 185 190
 Asn Tyr Asp Pro Ser Lys Thr Cys Tyr Gln Glu Gln Thr Gln Ser His
 195 200 205
 Val Ser Trp Leu Cys Ser Lys Pro Phe Lys Val Ile Cys Ile Tyr Ile
 210 215 220
 Ser Phe Tyr Ser Thr Asp Tyr Lys Leu Val Gln Lys Val Cys Pro Asp
 225 230 235 240
 Tyr Asn Tyr His Ser Asp Thr Pro Tyr Phe Pro Ser Gly

245

250

<210> 5661

<211> 578

<212> DNA

<213> Homo sapiens

<400> 5661

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 120
 ataaccagtg gcacggcaag gaccagcag gaagcaccag ccactggccc cgacctcccg
 180
 caccaggagc ctgacgggca cttagacaca cacagtggcc tgagctccaa ctccagcatg
 240
 accacgctgg agcttcagca gtactggcag aaccagaaa ggcgtggaa gcacgtcaaa
 300
 ctgctctttg agatcgcttc agctcgcatc gaggagagaa aagtctctaa gtttgtgatg
 360
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 420
 ccagaaccag acccgagatg tccacgtcaa agtgacatgc tctgagaggc agcacacaca
 480
 gaataaccct gcacccaaat tccaggaagc tcttaggggt catccagctg ggcctagggg
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 578

<210> 5662

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5662

Met	Thr	Leu	Leu	Pro	Asp	Pro	Trp	Thr	His	Thr	Ala	Leu	Gly	Thr	Gly
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Cys	Leu	Gly	Ala	Cys	Lys	Ser	Arg	Ala	Pro	Trp	Glu	Pro	Trp	Cys	Met
			20				25						30		
Gly	Pro	Ile	Thr	Gln	Cys	Thr	Ala	Arg	Thr	Gln	Gln	Glu	Ala	Pro	Ala
		35					40				45				
Thr	Gly	Pro	Asp	Leu	Pro	His	Pro	Gly	Pro	Asp	Gly	His	Leu	Asp	Thr
		50				55				60					
His	Ser	Gly	Leu	Ser	Ser	Asn	Ser	Ser	Met	Thr	Thr	Arg	Glu	Leu	Gln
65						70			75					80	
Gln	Tyr	Trp	Gln	Asn	Gln	Lys	Cys	Arg	Trp	Lys	His	Val	Lys	Leu	Leu
			85					90					95		
Phe	Glu	Ile	Ala	Ser	Ala	Arg	Ile	Glu	Glu	Arg	Lys	Val	Ser	Lys	Phe
		100					105					110			
Val	Met	Gly	Lys	Ser	Arg	Pro	Gly	Glu	Met	Thr	Tyr	Pro	Gly	Ser	Arg
		115					120				125				
Gly	Glu	Thr	Gly	Thr	Ala	Pro	Glu	Pro	Asp	Pro	Arg	Cys	Pro	Arg	Gln
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Ser	Asp	Met	Leu												

145

<210> 5663

<211> 857

<212> DNA

<213> Homo sapiens

<400> 5663

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120
agacaggagg ctgccgtggg caagaagggc caagccttga agtctcacgg caccctctgt
180
gggggaggta taaggctcag gggccaacta ctgggtcttg cagtcctcat cgttgctgtg
240
ggctgtcttc acctctctta gttccttctg tagctcagac tcggccacca caacctcttc
300
tggtctctcg taagagatga tcagggtgca gttggcgtgg gcaaagctca gcaaggcgtc
360
atccagaggt agctggtgtc tatctagatc aggaatggag aacttcttgt agtactcttc
420
gttggttgtt ctgacaatga tgcagcgctc cttctgtgtc acagagacac tatagacatc
480
cttaggatag gggagggttc gaatccgcca ctggaaactc atcttggtgt ccttgcgcat
540
gaagatagga ttggcattgc tttccttgat gagttcagcg ccaggttcc ctgctcttag
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660
acgccacttt ctcaagaatg gttcactcgt cttctcgtca tattcttcag ccatttcttc
720
gocgtctggg aataaatagt gaaccttctc tctcccgctc tgcagcagcg cagtcttctg
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840
gccagccgc tgccatg
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<210> 5664

<211> 203

<212> PRT

<213> Homo sapiens

<400> 5664

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Met Ala Val Thr Gly Trp Leu Glu Ser Leu Arg Thr Ala Gln Lys Thr
1           5           10           15
Ala Leu Leu Gln Asp Gly Arg Arg Lys Val His Tyr Leu Phe Pro Asp
20           25           30
Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu
35           40           45
Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp
50           55           60
Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

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65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
      85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
      100          105          110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
      115          120          125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
      130          135          140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
      145          150          155          160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
      165          170          175          180
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
      185          190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
      195          200

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<210> 5665

<211> 531

<212> DNA

<213> Homo sapiens

<400> 5665

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120
cagcggccct ctgaagtcac ttgcttcacg gaggtgttac tgtctgtctg tggacagagc
180
atgatggggg ctgcaagggc tccctcaaac cctggactcc tccaacagag ggctcctggt
240
tgccaggctc agctctgccc tgcgtcgggc ccaggggcgt gggaggggtg ttaatcctgg
300
cccgggcctt cccgcaggt ggagcgcgtg tcgcacccgc tgctgcagca gcagtatgag
360
ctgtaccggg agcgcctgct gcagcgtatg gagcggcgcc cgggtggagca ggtgtgtgat
420
cacggcacga cggcaccggc agtgctgtac atctgcgccc acgggttcaa ccgcagcttc
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531

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<210> 5666

<211> 79

<212> PRT

<213> Homo sapiens

<400> 5666

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Ser Trp Pro Gly Pro Ser Pro Gln Val Glu Arg Val Ser His Pro Leu
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Leu Gln Gln Gln Tyr Glu Leu Tyr Arg Glu Arg Leu Leu Gln Arg Cys
20          25          30
Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

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35	40	45
Ala Val Pro Asp Ile Cys	Ala His Gly Phe Asn Arg	Ser Phe Cys Gly
50	55	60
Arg Asn Ala Thr Val Tyr	Gly Lys Gly Val Tyr	Phe Ala Arg Arg
65	70	75

<210> 5667
 <211> 858
 <212> DNA
 <213> Homo sapiens

<400> 5667
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 aagaaagata tgacatttct acatgaagga aatgactcca aagtagatgg ttagtaaac
 120
 ttgagaagt taagaatgat ttccaaggaa atccgccaag ttgtcgaat gacttctgct
 180
 aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaa cacaattca
 240
 aacatgctgg atgttcaggg aggtgctcac aaaaaaggg cacgcccag ctctctgctt
 300
 aatggccaaga agctatatga ggatgccaa atggcaagga aggtgaagca gtatctttcc
 360
 agtctcgatg tagagacaga tgaggagaag ttccagatga tgtcattaca gntggagcct
 420
 gcatatggta cctgtgagta caagttttca tttatgtgac gctaaagagc acaacaaaat
 480
 aaaaacttat ttctctagaa ttatacctaa gtcccaagaa aattaacttt cactcacaaa
 540
 agattgctgg cataccttaa gcatcatgtg atccaattaa tcacagactg aatccccatcc
 600
 attcctgatg gctacactat ccaaaaaata gagggataag tagatcttta aaaagctttt
 660
 taattctttt aaaaactgga tcattataga ggaggctttc tgtttgagaa catttttata
 720
 ttcaccccta aagagtaaac ataagtggaa tttttacctc tttttatttc atggataata
 780
 tttaccaact agaaaatata agaaatttga ttaaaacacc agtgataata ggtagcttac
 840
 aggtgccagt agtaaggt
 858

<210> 5668
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 5668
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 phe Pro Val Val Lys Lys Asp Met Thr Phe Leu His Glu Gly Asn Asp
 20 25 30
 Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

35	40	45
Lys Glu Ile Arg Gln Val Val Arg Met Thr Ser Ala Asn Met Asp Pro		
50	55	60
Ala Met Met Phe Arg Gln Arg Ser Leu Ser Gln Gly Ser Thr Asn Ser		
65	70	75
Asn Met Leu Asp Val Gln Gly Gly Ala His Lys Lys Arg Ala Arg Arg		80
	85	90
Ser Ser Leu Leu Asn Ala Lys Lys Leu Tyr Glu Asp Ala Gln Met Ala		95
	100	105
Arg Lys Val Lys Gln Tyr Leu Ser Ser Leu Asp Val Glu Thr Asp Glu		110
	115	120
Glu Lys Phe Gln Met Met Ser Leu Gln Xaa Glu Pro Ala Tyr Gly Thr		125
	130	135
Cys Glu Tyr Lys Phe Ser Phe Met		140
145	150	

<210> 5669

<211> 1842

<212> DNA

<213> Homo sapiens

<400> 5669

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120
gccatgatgc gcagctccat agagaggggc aaatgggtct tcttcagaa ctgccacctg
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240
cacagggact tccgcctctg gctcaccagc ctgccagca acaagttccc agtgtccatc
300
ctgcagaacg gctccaagat gaccattgag ccgccacgcg gtgtcagggc caacctgctg
360
aagtcctata gtgaccttgg tgaagacttc ctcaactcct gccacaaggt gatggagtcc
420
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480
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540
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600
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660
atgaacatct tggaggactt ctacaacctt gacgtgtctt cccctgagca cagctacagc
720
gcctcgggca tctaccacca gatcccgcct acctacgacc tccacgggta cctctcctac
780
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840
atcacctttg cccagaacga gacgttgcgc ctctctggca ccatcatcca gctgcaaccc
900
aatcatctt ctgcaggcag ccagggcccg gaggagatag tggaggacgt caccctaaac
960

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attctgctca aggtgctga gcctatcaac ttgcaatggg tgatggccaa gtacccagtg
 1020
 ctgtatgagg aatcaatgaa cacagtacta gtacaagagg tcattaggtg caatcggtg
 1080
 ctgcagggtga tcacacagac actgcaagac ctactcaagg cactcaaggg gctggttagtg
 1140
 atgtcctctc agctggagct gatggctgcc agcctgtaca acaatactgt gcctgagctc
 1200
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 1260
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 1320
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 1380
 tttgtcatct ccattgacac catctccttt gattttcaagg tgatgtttga ggcaccatca
 1440
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 1500
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 1680
 accaactatg tcattgctgt ggagatcccc acccatcagc cccagcgaca ctggataaag
 1740
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 1842

<210> 5670

<211> 591

<212> PRT

<213> Homo sapiens

<400> 5670

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 20 25 30
 Gln Gly Gln Gly Pro Arg Ala Glu Ala Met Met Arg Ser Ser Ile Glu
 35 40 45
 Arg Gly Lys Trp Val Phe Phe Gln Asn Cys His Leu Ala Pro Ser Trp
 50 55 60
 Met Pro Ala Leu Glu Arg Leu Ile Glu His Ile Asn Pro Asp Lys Val
 65 70 75 80
 His Arg Asp Phe Arg Leu Trp Leu Thr Ser Leu Pro Ser Asn Lys Phe
 85 90 95
 Pro Val Ser Ile Leu Gln Asn Gly Ser Lys Met Thr Ile Glu Pro Pro
 100 105 110
 Arg Gly Val Arg Ala Asn Leu Leu Lys Ser Tyr Ser Ser Leu Gly Glu
 115 120 125
 Asp Phe Leu Asn Ser Cys His Lys Val Met Glu Phe Lys Ser Leu Leu

130					135					140					
Leu	Ser	Leu	Cys	Leu	Phe	His	Gly	Asn	Ala	Leu	Glu	Arg	Arg	Lys	Phe
145					150					155					160
Gly	Pro	Leu	Gly	Phe	Asn	Ile	Pro	Tyr	Glu	Phe	Thr	Asp	Gly	Asp	Leu
				165					170						175
Arg	Ile	Cys	Ile	Ser	Gln	Leu	Lys	Met	Phe	Leu	Asp	Glu	Tyr	Asp	Asp
			180						185					190	
Ile	Pro	Tyr	Lys	Val	Leu	Lys	Tyr	Thr	Ala	Gly	Glu	Ile	Asn	Tyr	Gly
			195				200					205			
Gly	Arg	Val	Thr	Asp	Asp	Trp	Asp	Arg	Arg	Cys	Ile	Met	Asn	Ile	Leu
	210					215					220				
Glu	Asp	Phe	Tyr	Asn	Pro	Asp	Val	Leu	Ser	Pro	Glu	His	Ser	Tyr	Ser
225					230					235					240
Ala	Ser	Gly	Ile	Tyr	His	Gln	Ile	Pro	Pro	Thr	Tyr	Asp	Leu	His	Gly
				245					250						255
Tyr	Leu	Ser	Tyr	Ile	Lys	Ser	Leu	Pro	Leu	Asn	Asp	Met	Pro	Glu	Ile
			260				265						270		
Phe	Gly	Leu	His	Asp	Asn	Ala	Asn	Ile	Thr	Phe	Ala	Gln	Asn	Glu	Thr
			275				280					285			
Phe	Ala	Leu	Leu	Gly	Thr	Ile	Ile	Gln	Leu	Gln	Pro	Lys	Ser	Ser	Ser
	290					295				300					
Ala	Gly	Ser	Gln	Gly	Arg	Glu	Glu	Ile	Val	Glu	Asp	Val	Thr	Gln	Asn
305					310					315					320
Ile	Leu	Leu	Lys	Val	Pro	Glu	Pro	Ile	Asn	Leu	Gln	Trp	Val	Met	Ala
			325						330					335	
Lys	Tyr	Pro	Val	Leu	Tyr	Glu	Glu	Ser	Met	Asn	Thr	Val	Leu	Val	Gln
			340					345					350		
Glu	Val	Ile	Arg	Tyr	Asn	Arg	Leu	Leu	Gln	Val	Ile	Thr	Gln	Thr	Leu
		355				360						365			
Gln	Asp	Leu	Leu	Lys	Ala	Leu	Lys	Gly	Leu	Val	Val	Met	Ser	Ser	Gln
	370					375					380				
Leu	Glu	Leu	Met	Ala	Ala	Ser	Leu	Tyr	Asn	Asn	Thr	Val	Pro	Glu	Leu
385					390					395					400
Trp	Ser	Ala	Lys	Ala	Tyr	Pro	Ser	Leu	Lys	Pro	Leu	Ser	Ser	Trp	Val
			405						410					415	
Met	Asp	Leu	Leu	Gln	Arg	Leu	Asp	Phe	Leu	Gln	Ala	Trp	Ile	Gln	Asp
			420					425					430		
Gly	Ile	Pro	Ala	Val	Phe	Trp	Ile	Ser	Gly	Phe	Phe	Phe	Pro	Gln	Ala
			435				440						445		
Phe	Leu	Thr	Gly	Thr	Leu	Gln	Asn	Phe	Ala	Arg	Lys	Phe	Val	Ile	Ser
	450					455					460				
Ile	Asp	Thr	Ile	Ser	Phe	Asp	Phe	Lys	Val	Met	Phe	Glu	Ala	Pro	Ser
465					470					475					480
Glu	Leu	Thr	Gln	Arg	Pro	Gln	Val	Gly	Cys	Tyr	Ile	His	Gly	Leu	Phe
			485						490					495	
Leu	Glu	Gly	Ala	Arg	Trp	Asp	Pro	Glu	Ala	Phe	Gln	Leu	Ala	Glu	Ser
			500				505						510		
Gln	Pro	Lys	Glu	Leu	Tyr	Thr	Glu	Met	Ala	Val	Ile	Trp	Leu	Leu	Pro
			515				520					525			
Thr	Pro	Asn	Arg	Lys	Ala	Gln	Asp	Gln	Asp	Phe	Tyr	Leu	Cys	Pro	Ile
	530				535					540					
Tyr	Lys	Thr	Leu	Thr	Arg	Ala	Gly	Thr	Leu	Ser	Thr	Thr	Gly	His	Ser
545					550				555						560
Thr	Asn	Tyr	Val	Ile	Ala	Val	Glu	Ile	Pro	Thr	His	Gln	Pro	Gln	Arg

	565	570	575
His Trp Ile Lys Arg Gly Val Ala Leu Ile Cys Ala Leu Asp Tyr	580	585	590
<210>	5671		
<211>	818		
<212>	DNA		
<213>	Homo sapiens		
<400>	5671		
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120			tctccttgca
gtgtgcctatc	tttgtctctt	ctcttccggc	ttcgcagatga
180			atgtgcagcc
tgtgggtatg	gggttttatcc	tgccgagaag	atcagctgta
240			tagatcagat
gcctgtttttc	actgtgaagt	ttgcaagatg	atgctgtctg
300			ttaataacct
cagaaaaaag	cgtactgtca	cgcccataac	cctaagaaca
360			acactttcac
cacactccat	taaatctaaa	tgtgaggaca	tttcagaggg
420			ccatcagttg
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gaaggggaat	cttgggtgcc	aggagctctg	ccagaccccc
600			aaattgtaag
gctcgaaagt	ctcttggtga	ggaatatata	gaagactatg
660			agcaaccacg
agctttccag	ccatgatcac	acctgtctat	caaagggccca
720			agaaagccaa
agccaagtgg	agtataagag	agggcatgat	gaacgcattc
780			ccaggtttctc
gatactcctg	agctgctacg	gagcaaggct	tggggcac
818			

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Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys
      85                      90                      95
Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro
      100                      105                      110
Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly
      115                      120                      125
Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val
      130                      135                      140
Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Tyr Thr Glu Asp
      145                      150                      155
Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro
      165                      170                      175
Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu
      180                      185                      190
Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala
      195                      200                      205
Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly
      210                      215                      220

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<210> 5673

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5673

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120
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300
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360
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480
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atgggtcaagg ttgccctgtc cacagctgct gcaacgccat ccagggtctc gtctgtcttc
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720
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840

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gccagactga gcagctcttc tctgcggggg aagagggttct tgcgcttctg agcaccaatg
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 960
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 1020
 tgctaatttc gtaagggtgag tggacctga tgtcgtccac gtcttctctt tcaaacctgt
 1080
 gcatgagcaa agaactggag tcattgtattt ccaaccaga cacaaggacg gtgagcctcc
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 1260
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 1279

<210> 5674
 <211> 81
 <212> PRT
 <213> Homo sapiens

<400> 5674
 Leu His Ser Gln Ile Tyr Ser Thr Ala Lys Lys Ala Ser Leu Ser Met
 1 5 10 15
 Lys Gly Ser Arg Asp Lys Thr Arg Ala Ala Ser Ser Arg Pro Val Pro
 20 25 30
 Ser Val Leu Gly Val Pro Pro Trp Ser Thr Leu Leu Gln His Pro Gln
 35 40 45
 Asn Met Trp Pro Gly Pro Ala Gln Gln Gln Gly Gln Pro Ser Gly Arg
 50 55 60
 Gln Ala Trp Cys Thr Pro Gly Glu Ala Pro Gly Ala Glu Ala Ala Pro
 65 70 75 80
 Gln

<210> 5675
 <211> 1074
 <212> DNA
 <213> Homo sapiens

<400> 5675
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 120
 gggctggggc aggggctgag gctgaaagca gcagcctgcc tagtgggtga cgccaggggc
 180
 cggtgtaaca tggcacccgag gttggggcca cagcaatgtg tgggacggtg ggggtgggctg
 240
 gggcccttgg ctccaagcat tagttctcca agctctggtc cgttctccta cctccttcaa
 300
 ggggcaccag ggctacaagg tggtagttga gtattggggc ccgactcctg gggcactgga
 360

gtgggtctcta ggccccaggc cccaaggaga gggctggggtt tctgggagag tgcgtggctct
 420
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 480
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 540
 aaccgcgatgc ccagtgggta ctgcacggag ctgtaggagg tcacagtgtc gtgtacaggg
 600
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 720
 cacagcagaa gcaggaggac cgccagcagg atgagcctag gagagcaagg ctctaccact
 780
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 840
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 900
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 960
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 1074

<210> 5676

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5676

Glu Val Thr Val Leu Cys Thr Gly Leu Ser Leu Ser Ile Gly Met Thr
 1 5 10 15
 Ala Thr Ser Gln Gly Cys Arg Ala Gly Gly Arg Cys Gly Trp Ala Cys
 20 25 30
 Ala Cys Phe Arg Arg Gln Gln Asn Arg Thr Gln Pro Ala Val Thr Pro
 35 40 45
 His Ser Arg Ser Arg Arg Thr Ala Ser Arg Met Ser Leu Gly Glu Gln
 50 55 60
 Gly Ser Thr Thr Gly Leu Thr Leu Gly His Arg Ala Pro Ala Pro Trp
 65 70 75 80
 Gly Met Ser Trp His Asn His Arg Arg Gln Val Asn Arg Ile Lys Ser
 85 90 95
 Arg Gln Cys Leu Ser Met Ser Glu Thr Ala Val Ala Arg Ala Trp Pro
 100 105 110
 Arg Ala Ala Gly Pro Ala Leu Ala Ile Ser Pro Gly Leu Ala Arg Gly
 115 120 125
 Gly Leu Gly Leu Thr Pro Arg Thr Arg Cys Pro Gln Arg Val Pro His
 130 135 140
 Cys
 145

<210> 5677

<211> 477

<212> DNA

<213> Homo sapiens

<400> 5677

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120
agggaaaagca agatgcagca gtgaggccct ctctgggtatc cattcattca cttcactcaa
180
cagctgttta tgaccatgag caatacaagc cttgtgaaga tcctggagca gggcacaagc
240
cgctgacgtc tgctccagtg agaagccctg ctgccttccc caattcgctt tctttccgca
300
gccgccgctg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca
360
ccagctggag aagaccacca atgctgagat gaggagggtg ctggctgagc tgctggagct
420
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477

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<210> 5678

<211> 151

<212> PRT

<213> Homo sapiens

<400> 5678

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Met Ala Ser Leu Arg Leu Cys Ser Gly His Pro Ser Ser Ser Ser Ser
1      5      10      15
Ala Ser Thr Ser Leu Ile Ser Ala Leu Val Val Phe Ser Ser Trp Cys
20     25     30
Met Glu Trp Thr Ser Arg Tyr Phe His Met Gln Ile Arg Gly Arg Gly
35     40     45
Ser Gly Gly Cys Gly Lys Lys Ala Asn Trp Gly Arg Gln Gln Gly Phe
50     55     60
Ser Leu Glu Gln Thr Ser Ala Ala Cys Ala Leu Leu Gln Asp Leu His
65     70     75     80
Lys Ala Cys Ile Ala His Gly His Lys Gln Leu Leu Ser Glu Val Asn
85     90     95
Glu Trp Ile Pro Glu Arg Ala Ser Leu Leu His Leu Ala Phe Pro Thr
100    105    110
Ser Asn Pro Leu Gly Gln Arg Gly Gly Val Leu Pro Leu Leu His Gln
115    120    125
Cys Pro Phe Leu Pro Trp Ser Gln Ala Ala Ser Phe Gln His Arg Pro
130    135    140
Leu Gln Arg Gly Thr Ala Ala
145    150

```

<210> 5679

<211> 665

<212> DNA

<213> Homo sapiens

<400> 5679


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gggaggatct accatgaaga aggtcaagaa gaaaaggta gaggccagac gccaccggac
120
tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca
180
ccacagcagc ctagtctctga atccacacca cagcagccta gcctgaatc cacaccacag
240
cattccagcc ttgaaaccac ctcccggcag ccagcattcc aagcccttcc agcaccggaa
300
atccgcgcgt cctcttgctg ccttttatct ccagatgcta acgtgaaggc agccctccta
360
tccaggaaag cagaaaatct tcaagaaaac cctccagcta tcgtaacgcg tgcctccaa
420
gccctcgaa ctgtggctgt ggctctgggg gctctaggag ctgcctacta catcactgaa
480
tcttgtaaa caagccctta ggcccacagt ctggcagacc tccaccagcc ccaggagtgtg
540
atagggtgatg gcgctgggag aagatgttca gaatatctca aaagccaagt ccagaagatc
600
cagtttccat caaagggacc tctctgtgta ccaaaatcta aaaaagaaa aaaaaacgaa
660
aaaaa
665

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<210> 5680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5680

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Val Gly Arg Ile Tyr His Glu Glu Gly Gln Glu Glu Lys Val Arg Gly
1      5      10      15
Gln Thr Pro Pro Asp Ser Thr Ser Gln His Ala Gly Ser Asn Ser Thr
20     25     30
Ser Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln Gln Pro Ser Pro Glu
35     40     45
Ser Thr Pro Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln His Ser Ser
50     55     60
Leu Glu Thr Thr Ser Arg Gln Pro Ala Phe Gln Ala Leu Pro Ala Pro
65     70     75     80
Glu Ile Arg Arg Ser Ser Cys Cys Leu Leu Ser Pro Asp Ala Asn Val
85     90     95
Lys Ala Ala Pro Gln Ser Arg Lys Ala Glu Asn Leu Gln Glu Asn Pro
100    105    110
Pro Val Ile Val Thr Arg Val Leu Gln Ala Leu Gly Thr Val Ala Val
115    120    125
Ala Leu Gly Ala Leu Gly Ala Ala Tyr Tyr Ile Thr Glu Ser Leu
130    135    140

```

<210> 5681

<211> 1402

<212> DNA

<213> Homo sapiens

<400> 5681
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gtcgggacct ggtttccggg catgagctga gaccaccacg ccgagggcac gagtatttca
120
tagacattga tgggaagcaga aacaaaaact ctcccccctg agaatgcacg catcctttca
180
gagggctctc tgcaggaaagg acaccgatta tggattggca acctggaccc caaaattacc
240
gaataccacc tcctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc
300
ttccacaagt caggtgcttt ggagggacag cctcgaggct actgttttgt taactttgaa
360
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420
aagctgggtg tgcgatggcg acatgctcaa gtaaagagat atgatcataa caagaatgat
480
aagattcttc caatcagctc cgagccatcc tcaagcactg agcctactca gtctaaccct
540
agtgtcactg caaagataaa agccattgaa gcaaaactga aaatgatggc gaaaaatcct
600
gatgcagagt atccagcagc gcctgtttat tcctacttta agccaccaga taaaaaaagg
660
actactccat attctagaac agcatggaaa tctcgaagat gatggttgtg aattactgtg
720
gcagcaaaag caaattggtc tccacaccta aaatcgtctg cctgtgtact ttgtagatgt
780
gaatgggtact attcaacgga gcacaatcac atgttagcat ttggtaacat aatgtttttg
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gatgttctta tggatgtttc tccctaatac tatgtatgga attgagcagc atccagaata
900
aatagcgttg tatcccaaat tgtgatttga accctgggat gctctaattg gctggttgtg
960
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1020
atattattta aatcaggaaa ctaaaaaat taacatctat taaaaaattg agcatttttc
1080
tacgctcgtg tgtcttttac aacataaaga aaaagtaaaa ggaggggagg gaagtggag
1140
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ctggactgaa aaagagaaag ttcttggcaa aaaggagctg attctttgaa caaatgttgt
1260
agtaattctg ttaagaatta tgcttattgt ttcaaaatcc caactaggaa aacatgggtg
1320
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1380
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1402

<210> 5682

<211> 190

<212> PRT

<213> Homo sapiens

<400> 5682

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Met Glu Ala Glu Thr Lys Thr Leu Pro Leu Glu Asn Ala Ser Ile Leu
 1                               5                               10           15
Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
                20                               25           30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Gln Lys Phe
 35                               40                               45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
 50                               55                               60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
 65                               70                               75           80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
                85                               90           95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
                100                              105           110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
 115                              120                              125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
 130                              135                              140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
 145                              150                              155           160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
                165                              170           175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
                180                              185           190

```

<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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 120
atgctttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
 180
tgctgctttc tgggttaaag tagggaaata cagtgttcca gggcatagga atgggtctct
 240
gggtagaaaa gtttattttg ctggtgggag gcagggtttg ttaataaaagc tttgaaatac
 300
acaaatttca ttctggatgc tgatgctg
 328

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<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

```

Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

```

```

      1             5             10             15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20             25             30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35             40             45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50             55             60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65             70             75             80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85             90             95
Ser Leu Gly Gln Arg Met Asp
      100

```

<210> 5685

<211> 604

<212> DNA

<213> Homo sapiens

<400> 5685

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ctggcctacg agtctgacgg gatcgtggtt tccaacgaca catacgtga cctccaaggc
120
gagcggcagg agtgaagcg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggccctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caaggggtga gctgggggct gggctctgcg gggccctgtg gccatgggag
300
gttcggggtc ttggctccag gcagctttga gagtgagacg gatagctcac cacataggag
360
aaatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatggttc caggtggcct ctctacgaac
480
caacatggca tctctcgagc agaggccatg ggccagtggg tgcgggctgc catccccga
540
cgacttcagg gagggagttc ccctaaaggt gcccatgggc tgtggccctc tagaccgggg
600
atcc
604

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<210> 5686

<211> 69

<212> PRT

<213> Homo sapiens

<400> 5686

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Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
1             5             10             15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
20             25             30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

```


tgaacaatca gaatcataga agagtgtgag cactggtcct ttgtcttcca ggtgggacag
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tgtgtgtgtg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac
180
tctcgcccat cacctatcag tgccactncc tccagctctc gttcctgaaa cccgagagta
240
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300
aacactgaga cccagggtcc aaaggcagac tcctcagggt cccgggaagg gagcctttcc
360
ccagccagag gagacggctc tcctatcctc aatgggtgga gtttgtctcc aggaacggca
420
gctgtgggtg gctcttcttt ggacagtcct gtacaggcca tatctccaag tactccatct
480
gctgctgaag gatacgacct gaaaatagga ctttctttgg cccccgcagc aggatcaacc
540
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agttagtaac ccattggatg catggacaat aggacagttg ggggaagtat gagacaccc
660
cctgaacaga caaatgtgtg gcatacccca cctcacgtgg ccagtgccct tgcaggggcc
720
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780
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840
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960
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1080
gttggaacct ctgaaaccag cctgcatacc gtggtacaag gcaggggtga actcatcata
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1260
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1320
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1380
ttaagaaaaa aaattatata taaatatata tatatatatt atatagccaa ctctgttgac
1440
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1500
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1560
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1620
ggagttaaaa aatgaaaggg catatgtaag ttgcaaaggt ggagggtttt agactctcat
1680

gcttcagggtg ctgtcgggggt aaaagtaact gtttttcccc ttctcttaaa accacagagg
 1740
 acctgtgaca gctctgcaga aatgccagtg cctggccccc tcttgcttt tatgggtgag
 1800
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 1860
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 1897

<210> 5690
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 5690
 Thr Ile Arg Ile Ile Glu Glu Cys Glu His Trp Ser Phe Val Phe Gln
 1 5 10 15
 Val Gly Gln Cys Val Val Val Phe Ser Gln Ala Pro Ser Gly Arg Ala
 20 25 30
 Pro Leu Ser Pro Ser Leu Asn Ser Arg Pro Ser Pro Ile Ser Ala Thr
 35 40 45
 Xaa Ser Ser Ser Arg Ser
 50

<210> 5691
 <211> 1227
 <212> DNA
 <213> Homo sapiens

<400> 5691
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 120
 catcaaaaacg aggacgaacc cattcgtggt agctaccatc ggaatatcca ctataattca
 180
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 300
 aacagcagat gctagaagac aagaacaggg ccacagactg ggaggccaca aatgaagcca
 360
 toagaggagca ggtggctcgg gaatcctacc tgcagtgggt gcgggatcag gagaacagg
 420
 ctgcgccagt ccgaggcccc agccagcccc ggaaagccag cgcacatgc agttcgccca
 480
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 720

agtgccgggc cctcattcag cagatgtccc cctctgcctt tggctgtaat gactgggag
 780
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 840
 agaaaaacaa agtgacacaga gacccgcccc cagacaagag ttgatggaga cccagggtt
 900
 ggacaccate tcccaacccc agggattcgg gcaagggtgc cgaagataga caagaggcac
 960
 acagagacag accaactggc agccaggcag cccagagga gagagacatt cagacagagg
 1020
 aaagtctccc tgcccctcat tccttccaag atgagaaaaa ctgtccgcca cccccgaca
 1080
 ctgatgccag ggaggtggga ggaagaagt ggaaatttcc ctccccagta ccccaagaa
 1140
 cgtctgagcc ttcaatgttg aattttttct ttattaaaaa tactttttatc ttataaaatc
 1200
 aactaatcaa aaatgaaaaa aaaaaaa
 1227

<210> 5692

<211> 86

<212> PRT

<213> Homo sapiens

<400> 5692

Lys Arg Lys Asn Asn Cys His Gly Asn His Ile Glu Met Gln Ala Met
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 Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr Gln Tyr Ser Thr Glu
 20 25 30
 Pro Ile Asn Thr Phe His Gly Ile His Gln Asn Glu Asp Glu Pro Ile
 35 40 45
 Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn Ser Val Val Asn Pro
 50 55 60
 Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Cys His His Ser Asn Gln
 65 70 75 80
 Gly Leu Gln Ser Ser Leu
 85

<210> 5693

<211> 389

<212> DNA

<213> Homo sapiens

<400> 5693

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 gacactgggg cacctctcgc cctgtcccaa ggccacgctg gctctcttca ggccatggc
 120
 tccaaacccc cagggcccct cgtcgggcgg tcccaactta gtctccctc gaecggccct
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<210> 5694
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 <212> PRT
 <213> Homo sapiens

<400> 5694
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<210> 5696

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

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Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln
      260              265              270
Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val
      275              280              285
Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg
      290              295              300
Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser
305              310              315              320
Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp
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<210> 5697

<211> 3362

<212> DNA

<213> Homo sapiens

<400> 5697

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<210> 5698

<211> 403

<212> PRT

<213> Homo sapiens

<400> 5698

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			20					25					30		
Thr	Ser	Arg	Gly	Cys	Gly	Leu	Asp	Leu	Leu	Pro	Gln	Tyr	Val	Ser	Leu
			35				40					45			
Cys	Asp	Leu	Asp	Ala	Ile	Trp	Gly	Ile	Val	Val	Glu	Ala	Val	Ala	Gly
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Ala	Gly	Ala	Leu	Ile	Thr	Leu	Leu	Leu	Met	Leu	Ile	Leu	Leu	Val	Arg
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Leu	Pro	Phe	Ile	Lys	Glu	Lys	Lys	Ser	Pro	Val	Gly	Leu	His		
			85				90					95			
Phe	Leu	Phe	Leu	Leu	Gly	Thr	Leu	Gly	Leu	Phe	Gly	Leu	Thr	Phe	Ala
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      180              185              190
Cys Ala Tyr Glu Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met
      195              200              205
Val Leu Leu Val Val Thr Leu Gly Leu Ala Leu Phe Thr Leu Cys Gly
      210              215              220
Lys Phe Lys Arg Trp Lys Leu Asn Gly Ala Phe Leu Leu Ile Thr Ala
      225              230              235              240
Phe Leu Ser Val Leu Ile Trp Val Ala Trp Met Thr Met Tyr Leu Phe
      245              250              255
Gly Asn Val Lys Leu Gln Gln Gly Asp Ala Trp Asn Asp Pro Thr Leu
      260              265              270
Ala Ile Thr Leu Ala Ala Ser Gly Trp Val Phe Val Ile Phe His Ala
      275              280              285
Ile Pro Glu Ile His Cys Thr Leu Leu Pro Ala Leu Gln Glu Asn Thr
      290              295              300
Pro Asn Tyr Phe Asp Thr Ser Gln Pro Arg Met Arg Glu Thr Ala Phe
      305              310              315              320
Glu Glu Asp Val Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe
      325              330              335
Ser Met Asp Glu His Asn Ala Ala Leu Arg Thr Ala Gly Phe Pro Asn
      340              345              350
Gly Ser Leu Gly Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser
      355              360              365
Ala Pro Phe Arg Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val
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<210> 5699

<211> 1565

<212> DNA

<213> Homo sapiens

<400> 5699

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<210> 5700

<211> 197

<212> PRT

<213> Homo sapiens

<400> 5700

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 Glu Pro Gly Pro Glu Pro Leu Pro Trp Leu Gly Lys Met Ala Gln Leu

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Lys Ser Pro Phe Pro Leu Gln Pro Lys Asn Lys Arg Ser Tyr Ala Gln
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Asn Val Thr Val Trp Ile Lys Pro Ser Gly Leu Gln Thr Asp Val Gln
      85              90              95
Lys Ile Leu Arg Asn Ala Arg Lys Leu Pro Glu Lys Thr Gln Thr Phe
      100              105              110
Tyr Lys Glu Leu Asn Arg Leu Arg Lys Ala Ala Leu Ala Phe Gly Phe
      115              120              125
Leu Asp Leu Leu Lys Gly Val Ala Asp Met Leu Glu Arg Glu Cys Thr
      130              135              140
Leu Leu Pro Glu Thr Ala His Pro Asp Ala Ala Phe Gln Leu Thr His
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<210> 5701

<211> 1885

<212> DNA

<213> Homo sapiens

<400> 5701

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<211> 348

<212> PRT

<213> Homo sapiens

<400> 5702

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			20						25				30		
Leu	Leu	Tyr	Glu	Asp	Ile	Gly	Thr	Ser	Arg	Val	Arg	Tyr	Trp	Asp	Leu
			35				40					45			
Leu	Leu	Leu	Ile	Pro	Asn	Val	Leu	Phe	Leu	Ile	Phe	Leu	Leu	Trp	Lys
			50			55					60				
Leu	Pro	Ser	Ala	Arg	Ala	Lys	Ile	Arg	Ile	Thr	Ser	Ser	Pro	Ile	Phe

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Ile Thr Phe Tyr Ile Leu Val Phe Val Val Ala Leu Val Gly Ile Ala
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Ala Asp Lys Ile Leu Trp Glu Ile Thr Arg Phe Phe Leu Leu Ala Ile
      115          120          125
Glu Leu Ser Val Ile Ile Leu Gly Leu Ala Phe Gly His Leu Glu Ser
      130          135          140
Lys Ser Ser Ile Lys Arg Val Leu Ala Ile Thr Thr Val Leu Ser Leu
      145          150          155          160
Ala Tyr Ser Val Thr Gln Gly Thr Leu Glu Ile Leu Tyr Pro Asp Ala
      165          170          175
His Leu Ser Ala Glu Asp Phe Asn Ile Tyr Gly His Gly Gly Arg Gln
      180          185          190
Phe Trp Leu Val Ser Ser Cys Phe Phe Phe Leu Val Tyr Ser Leu Val
      195          200          205
Val Ile Leu Pro Lys Thr Pro Leu Lys Glu Arg Ile Ser Leu Pro Ser
      210          215          220
Arg Arg Ser Phe Tyr Val Tyr Ala Gly Ile Leu Ala Leu Leu Asn Leu
      225          230          235          240
Leu Gln Gly Leu Gly Ser Val Leu Leu Cys Phe Asp Ile Ile Glu Gly
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Pro Leu Ile Tyr Val Ala Phe Leu Arg Gly Phe Phe Gly Ser Glu Pro
      275          280          285
Lys Ile Leu Phe Xaa Leu Gln Met Pro Ser Gly Arg Asp Arg Gly Ala
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Arg Cys Thr Pro Thr Pro Ala Leu Arg Cys Gly Pro Ala Gly Gly Pro
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<210> 5703

<211> 1496

<212> DNA

<213> Homo sapiens

<400> 5703

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<210> 5704

<211> 269

<212> PRT

<213> Homo sapiens

<400> 5704

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			20				25				30				
Glu	Gly	Ser	Val	Leu	Arg	Arg	Gly	Phe	Gln	Thr	Cys	Glu	His	Trp	Lys
			35				40				45				
Gln	Ile	Phe	Met	Glu	Ile	Val	Gly	Val	Gln	Ser	Ala	Leu	Cys	Gly	Leu
	50					55				60					
Val	Leu	Ser	Leu	Leu	Ile	Cys	Val	Ala	Ala	Val	Ala	Val	Phe	Thr	Thr

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His Ile Leu Leu Leu Leu Pro Val Leu Leu Ser Ile Leu Gly Ile Val
              85              90              95
Cys Leu Val Val Thr Ile Met Tyr Trp Ser Gly Trp Glu Met Gly Ala
              100              105              110
Val Glu Ala Ile Ser Leu Ser Ile Leu Val Gly Ser Ser Val Asp Tyr
              115              120              125
Cys Val His Leu Val Glu Gly Tyr Leu Leu Ala Gly Glu Asn Leu Pro
              130              135              140
Pro His Gln Ala Glu Asp Ala Arg Thr Gln Arg Gln Trp Arg Thr Leu
145              150              155              160
Glu Ala Val Arg His Val Gly Val Ala Ile Val Ser Ser Ala Leu Thr
              165              170              175
Thr Val Ile Ala Thr Val Pro Leu Phe Phe Cys Ile Ile Ala Pro Phe
              180              185              190
Ala Lys Phe Gly Lys Ile Val Ala Leu Asn Thr Gly Val Ser Ile Leu
              195              200              205
Tyr Thr Leu Thr Val Ser Thr Ala Leu Leu Gly Ile Met Ala Pro Ser
              210              215              220
Ser Phe Thr Arg Thr Arg Thr Ser Phe Leu Lys Ala Leu Gly Ala Val
225              230              235              240
Leu Leu Ala Gly Ala Leu Gly Leu Gly Ala Cys Leu Val Leu Leu Gln
              245              250              255
Ser Gly Tyr Lys Ile Pro Leu Pro Ala Gly Ala Ser Leu
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<210> 5705

<211> 768

<212> DNA

<213> Homo sapiens

<400> 5705

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<211> 202

<212> PRT

<213> Homo sapiens

<400> 5706

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 His Thr Asn Arg Thr Thr Ser Trp Ile Asp Pro Arg Asp Arg Tyr Thr
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 Lys Pro Leu Thr Phe Ala Asp Cys Ile Ser Asp Glu Leu Pro Leu Gly
 65 70 75 80
 Trp Glu Glu Ala Tyr Asp Pro Gln Val Gly Asp Tyr Phe Ile Asp His
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<210> 5707

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<212> DNA

<213> Homo sapiens

<400> 5707

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<212> PRT

<213> Homo sapiens

<400> 5708

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 Leu Ile Lys Asn Asn Asn Thr Cys Lys Asp Phe Leu Ile Glu Ala Met
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 Lys Tyr His Leu Leu Pro Leu Asp Gln Arg Leu Leu Ile Lys Asn Pro
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 Arg Thr Lys Pro Arg Thr Pro Val Ser Leu Pro Lys Val Met Ile Val
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 Val Gly Gly Gln Ala Pro Lys Ala Ile Arg Ser Val Glu Cys Tyr Asp
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 Phe Glu Glu Asp Arg Trp Asp Gln Ile Ala Glu Leu Pro Ser Arg Arg
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 Cys Arg Ala Gly Val Val Phe Met Ala Gly His Val Tyr Ala Val Gly
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 Gly Phe Asn Gly Ser Leu Arg Val Arg Thr Val Asp Val Tyr Asp Gly
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 Val Lys Asp Gln Trp Thr Ser Ile Ala Ser Met Gln Glu Arg Arg Ser
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Thr Asn Glu Trp Phe Phe Val Ala Pro Met Asn Thr Arg Arg Ser Ser
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Val Gly Val Gly Val Val Glu Gly Lys Leu Tyr Ala Val Gly Gly Tyr
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Asp Gly Ala Ser Arg Gln Cys Leu Ser Thr Val Glu Gln Tyr Asn Pro
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Ala Thr Asn Glu Trp Ile Tyr Val Ala Asp Met Ser Thr Arg Arg Ser
385          390          395          400
Gly Ala Gly Val Gly Val Leu Ser Gly Gln Leu Tyr Ala Thr Gly Gly
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His Asp Gly Pro Leu Val Arg Lys Ser Val Glu Val Tyr Asp Pro Gly
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Thr Asn Thr Trp Lys Gln Val Ala Asp Met Asn Met Cys Arg Arg Asn
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Ala Gly Val Cys Ala Val Asn Gly Leu Leu Tyr Val Val Gly Gly Asp
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Asp Gly Ser Cys Asn Leu Ala Ser Val Glu Tyr Tyr Asn Pro Val Thr
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Asp Lys Trp Thr Leu Leu Pro Thr Asn Met Ser Thr Gly Arg Ser Tyr
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<210> 5709

<211> 1805

<212> DNA

<213> Homo sapiens

<400> 5709

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<210> 5710

<211> 441

<212> PRT

<213> Homo sapiens

<400> 5710

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 35 40 45
 Ala Phe Asp Gly Leu Ala Ser Leu Val Glu Leu Asn Leu Ala His Asn

50		55		60	
Asn	Leu	Ser	Ser	Leu	Pro
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Val	Glu	Leu	His	Leu	His
		85		90	
Leu	Trp	Leu	Ala	Trp	Trp
		100		105	
Cys	Cys	Gly	Arg	Cys	His
		115		120	
Val	Glu	Val	Asp	Gln	Ala
		130		135	
Asp	Ala	Pro	Arg	Asp	Leu
145		150		155	
Lys	Cys	Arg	Thr	Pro	Pro
		165		170	
Gly	Thr	Val	Leu	Ser	His
		180		185	
Asn	Asp	Gly	Thr	Leu	Asn
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Val	Tyr	Thr	Cys	Met	Val
		210		215	
Ala	Tyr	Leu	Asn	Val	Ser
		225		230	
Phe	Phe	Thr	Thr	Val	Glu
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Thr	Thr	Arg	Lys	Tyr	Lys
		260		265	
Pro	Ala	Tyr	Thr	Thr	Ser
		275		280	
Pro	Lys	Gln	Val	Ala	Val
		290		295	
Thr	Ser	Leu	Asp	Glu	Val
		305		310	
Phe	Val	Ala	Val	Thr	Leu
		325		330	
Lys	Leu	Arg	Lys	Arg	His
		340		345	
Thr	Val	Glu	Ile	Ile	Gln
		355		360	
Ala	Ala	Ala	Thr	Ala	Ala
		370		375	
Val	Leu	Pro	Thr	Ile	His
		385		390	
Ala	His	Gly	Ala	His	Trp
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Pro	Thr	Val	Thr	Thr	Ile
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Lys	Asp	Lys	Val	Gln	Glu
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<210> 5711

<211> 1142

<212> DNA

<213> Homo sapiens

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<210> 5712
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 <212> PRT
 <213> Homo sapiens

<400> 5712
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 35 40 45

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
 50 55 60
 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
 65 70 75 80
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys
 85 90 95
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln
 100 105 110
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln
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<210> 5713

<211> 1996

<212> DNA

<213> Homo sapiens

<400> 5713

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 1996

<210> 5714

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5714

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 Val Ser Glu Phe Phe Met Asn Ala Lys Lys Asn Lys Pro Glu Trp Arg
 35 40 45
 Glu Glu Gln Met Ala Ser Ile Lys Lys Asp Tyr Tyr Lys Ala Leu Glu
 50 55 60
 Asp Ala Asp Glu Lys Val Gln Leu Ala Asn Gln Ile Tyr Asp Leu Val
 65 70 75 80
 Asp Arg His Leu Arg Lys Leu Asp Gln Glu Leu Ala Lys Phe Lys Met


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Glu Leu Glu Ala Asp Asn Ala Gly Ile Thr Glu Ile Leu Glu Arg Arg
      100              105              110
Ser Leu Glu Leu Asp Thr Pro Ser Gln Pro Val Asn Asn His His Ala
      115              120              125
His Ser His Thr Pro Val Glu Lys Arg Lys Tyr Asn Pro Thr Ser His
      130              135              140
His Thr Thr Thr Asp His Ile Pro Glu Lys Lys Phe Lys Ser Glu Ala
      145              150              155
Leu Leu Ser Thr Leu Thr Ser Asp Ala Ser Lys Glu Asn Thr Leu Gly
      165              170              175
Cys Arg Asn Asn Asn Ser Thr Ala Ser Ser Asn Asn Ala Tyr Asn Val
      180              185              190
Asn Ser Ser Gln Pro Leu Gly Ser Tyr Asn Ile Gly Ser Leu Ser Ser
      195              200              205
Gly Thr Gly Ala Gly Ala Ile Thr Met Ala Ala Ala Gln Ala Val Gln
      210              215              220
Ala Thr Ala Gln Met Lys Glu Gly Arg Arg Thr Ser Ser Leu Lys Ala
      225              230              235
Ser Tyr Glu Ala Phe Lys Asn Asn Asp Phe Gln Leu Gly Lys Glu Phe
      245              250              255
Ser Met Ala Arg Glu Thr Val Gly Tyr Ser Ser Ser Ser Ala Leu Met
      260              265              270
Thr Thr Leu Thr Gln Asn Ala Ser Ser Ser Ala Ala Asp Ser Arg Ser
      275              280              285
Gly Arg Lys Ser Lys Asn Asn Asn Lys Ser Ser Ser Gln Gln Ser Ser
      290              295              300
Ser Ser Ser Ser Ser Ser Ser Leu Ser Ser Cys Ser Ser Ser Ser Thr
      305              310              315
Val Val Gln Glu Ile Ser Gln Gln Thr Thr Val Val Pro Glu Ser Asp
      325              330              335
Ser Asn Ser Gln Val Asp Trp Thr Tyr Asp Pro Asn Glu Pro Arg Tyr
      340              345              350
Cys Ile Cys Asn Gln Val Ser Tyr Gly Glu Met Val Gly Cys Asp Asn
      355              360              365
Gln Asp Cys Pro Ile Glu Trp Phe His Tyr Gly Cys Val Gly Leu Thr
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<210> 5715

<211> 1458

<212> DNA

<213> Homo sapiens

<400> 5715

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180

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<210> 5716

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5716

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Pro Leu Leu Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr
      65      70      75      80
Lys Leu Val Pro Gly Leu Gln Asp Ser Glu Glu Lys Arg Ile Arg Glu
      85      90      95
Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val Thr Gln Pro Thr Gly Glu
      100      105      110
Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro Phe Ser Ser Phe Asp His
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Ser Lys Ala His Tyr Tyr Arg Tyr Asp Glu Gln Leu Asn Leu Cys Leu
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<210> 5717

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 5717

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<210> 5718

<211> 228

<212> PRT

<213> Homo sapiens

<400> 5718

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			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
			35				40					45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
			50			55				60					
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
			65			70				75				80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
			85					90					95		
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105					110		
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
			115				120					125			
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
			130			135					140				
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
			145			150				155				160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
			165					170						175	
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
			180					185					190		
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
			195				200					205			
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
			210			215						220			
Asn	Ala	Tyr	Val												

225

<210> 5719

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5719

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120
ctccgtgccca tgcagtcggg aaagggaaac aggcactaat caaaggcaac tgcctactcg
180
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240
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300
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360
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420
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480
taagatctgg caaactctgt aagcatcttc acagtctttg tcggcagtag agaccccatg
540
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600
cagcagcagc gcggccacgg cgctgtccac gccgccggac agggcgacaca cgacgtgcgc
660
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720
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1140
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1260
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1320
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1380

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 1620
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 1980
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 2100
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 2160
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 2220
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 2267

<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

Val	Pro	Val	Leu	His	Lys	His	Pro	Cys	His	Leu	Val	Thr	Ser	Pro	Pro
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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
		35				40						45			
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50				55					60					
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65				70					75				80		
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90					95		
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
			100					105					110		
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
		115					120					125			
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

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130          135          140
Phe His Tyr Ala Val Asp Asn Leu Gly Ala Asp Ala Ile Ala Thr Gly
145          150          155          160
His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys
          165          170          175
His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg
          180          185          190
Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr
          195          200          205
Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe
210          215          220
Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu
225          230          235          240
Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys
          245          250          255
Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln
260          265          270
Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly
275          280          285
Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile
290          295          300
Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys
305          310          315          320
Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg
          325          330          335
Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro
340          345          350
Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg
355          360          365
His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly
370          375          380
Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly
385          390          395          400
Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys
          405          410          415
Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg
420          425          430
Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly
435          440          445
Pro Gly Leu Ser Pro Leu Leu
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<210> 5721

<211> 400

<212> DNA

<213> Homo sapiens

<400> 5721

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120
ggaatagcct tgccatgtct gttggacgct gacaaatatt tctggtgggc gcttttgtac
180

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ttgggtgaaca ccagctttaa ggaagatggc ccagactata cagaacacct gccatgccct
 240
 tgagactgca gactttcatc tacaacagtg gttaatgtaa aagagtagtt atgggtgtaaa
 300
 ctgggtgaatt tcttcttccc ttgtatttc taattgacct ttctctcctg taagaaaaa
 360
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 400

<210> 5722

<211> 80

<212> PRT

<213> Homo sapiens

<400> 5722

Leu	Asp	Ile	Ala	Asn	Gln	Thr	Gly	Arg	Ser	Ile	Arg	Ile	Pro	Pro	Ser
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Glu	Arg	Lys	Ala	Leu	Met	Leu	Ala	Met	Gly	Tyr	His	Glu	Lys	Gly	Arg
			20					25				30			
Ala	Phe	Leu	Lys	Arg	Lys	Glu	Tyr	Gly	Ile	Ala	Leu	Pro	Cys	Leu	Leu
			35				40				45				
Asp	Ala	Asp	Lys	Tyr	Phe	Trp	Trp	Ala	Leu	Leu	Tyr	Leu	Val	Asn	Thr
	50				55						60				
Ser	Phe	Lys	Glu	Asp	Gly	Pro	Asp	Tyr	Thr	Glu	His	Leu	Pro	Cys	Pro
65					70				75					80	

<210> 5723

<211> 376

<212> DNA

<213> Homo sapiens

<400> 5723

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 120
 ctgctttcta aagagtgggt gcatgccgga ctcagcggag ccatgtggga tggatgggtg
 180
 gcttcattt gcagcggatg tctgctctca gatgaaggca caggctgccc ctgccctgcc
 240
 cagcatgccc cctgccctgc atgccccctg cctgcatgt cacctgtcct acacatcccc
 300
 tgccctgcag gcccattctt gtccctcatg tcacctgtcc tgcacatgcc ctgccctgca
 360
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 376

<210> 5724

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5724

Xaa Thr Thr Phe Ser Ser Phe His Pro Pro Gln Pro Lys Leu Ser Ala

1	5	10	15
Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu Glu Ala Cys Arg Lys			
	20	25	30
Met Gly Val Pro Glu Val Trp Gly Leu Ser Lys Glu Trp Trp His			
	35	40	45
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
	50	55	60
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
	85	90	95
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
	100	105	110
Val Leu His Met Pro Cys Pro Ala Leu Leu His Ala			
	115	120	125

<210> 5725

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 5725

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 120
 accgcgcacg ggcgagcatg gggggcaagc agagcacggc gaccgcctcc cgggggcccc
 180
 ttccccgggg tctccaccga tgacagcgcc gtgccgccgc cgggaggggc gcccatcttc
 240
 gggcactacc ggacgggcgg cggggccatg gggctgcgca gcgcacgggt cagctcggtg
 300
 gcagggcatg gcatggaccc cagcacggcc gggggggtgc cctttggcct ctacaccccc
 360
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 420
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 480
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 540
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 660
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 720
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 780
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 960

tcattggttct cccttctctcc ctgaggacac caaattggat gagagcaagt ttgagagaag
 1020
 aatgaatcaa ctgctatcct tccctcacc cctcagccca ggagggaaa ggcatcttct
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 aaaaaaagtc tagtgtcgac
 1160

<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

Ala	Phe	Phe	Pro	Phe	Leu	Pro	Pro	Arg	Leu	Leu	Phe	Asp	Ser	Leu	Pro
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Leu	Tyr	Ala	Arg	Pro	Ala	Leu	Pro	Leu	Leu	Leu	Arg	Ser	Gly	Gly	Gly
			20					25					30		
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly
			35					40				45			
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val
			50			55					60				
Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe
			65			70				75				80	
Gly	His	Tyr	Arg	Thr	Gly	Gly	Gly	Ala	Met	Gly	Leu	Arg	Ser	Ala	Ser
			85					90						95	
Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly
			100					105						110	
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser
			115					120				125			
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala
			130					135				140			
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly
			145			150				155				160	
Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu
			165						170					175	
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro
			180					185					190		
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile
			195					200					205		
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr
			210				215					220			
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly
			225			230				235				240	
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys
			245					250						255	
Ile	Asp	Ser	Trp	Phe	Glu	Val	Asn	Arg	Ser	Cys	Pro	Glu	His	Pro	Ala
			260					265						270	

Asp

<210> 5727

<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

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120
gagatcctaa ggaccttgag ccccgaggag ctagagcagc tggactgcga actacaggag
180
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1200
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa
1237

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<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

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20	25	30	
Lys Tyr Arg Asp Ile Asp Glu Asp Glu Ile Leu Arg Thr Leu Ser Pro			
35	40	45	
Glu Glu Leu Glu Gln Leu Asp Cys Glu Leu Gln Glu Met Asp Pro Glu			
50	55	60	
Asn Met Leu Leu Pro Ala Gly Leu Arg Gln Arg Asp Gln Thr Lys Lys			
65	70	75	80
Ser Pro Thr Gly Pro Leu Asp Arg Glu Ala Leu Leu Gln Tyr Leu Glu			
85	90	95	
Gln Gln Ala Leu Glu Val Lys Glu Arg Asp Asp Leu Val Pro Phe Thr			
100	105	110	
Gly Glu Lys Lys Gly Lys Pro Tyr Ile Gln Pro Lys Arg Glu Ile Pro			
115	120	125	
Ala Glu Glu Gln Ile Thr Leu Glu Pro Glu Leu Glu Glu Ala Leu Ala			
130	135	140	
His Ala Thr Asp Ala Glu Met Cys Asp Ile Ala Ala Ile Leu Asp Met			
145	150	155	160
Tyr Thr Leu Met Ser Asn Lys Gln Tyr Tyr Asp Ala Leu Cys Ser Gly			
165	170	175	
Glu Ile Cys Asn Thr Glu Gly Ile Ser Ser Val Val Gln Pro Asp Lys			
180	185	190	
Tyr Lys Pro Val Pro Asp Glu Pro Pro Asn Pro Thr Asn Ile Glu Glu			
195	200	205	
Ile Leu Lys Arg Val Arg Ser Asn Asp Lys Glu Leu Glu Glu Val Asn			
210	215	220	
Leu Asn Asn Ile Gln Asp Ile Pro Ile Pro Met Leu Ser Glu Leu Cys			
225	230	235	240
Glu Ala Met Lys Ala Asn Thr Tyr Val Arg Ser Phe Ser Leu Val Ala			
245	250	255	
Thr Arg Ser Gly Asp Pro Ile Ala Asn Ala Val Ala Asp Met Leu Arg			
260	265	270	
Glu Asn Arg Ser Leu Gln Ser Leu Asn Ile Glu Ser Asn Phe Ile Ser			
275	280	285	
Ser Thr Gly Leu Met Ala Val Leu Lys Ala Val Arg Glu Asn Ala Thr			
290	295	300	
Leu Thr Glu Leu Arg Val Asp Asn Gln Arg Gln Trp Pro Gly Asp Ala			
305	310	315	320
Val Glu Met Glu Met Ala Thr Val Leu Glu Gln Cys Pro Ser Ile Val			
325	330	335	
Arg Phe Gly Tyr His Phe Thr Gln Gln Gly Pro Arg Ala Arg Ala Ala			
340	345	350	
Gln Ala Met Thr Arg Asn Asn Glu Leu Arg Arg Gln Gln Lys Lys Arg			
355	360	365	

<210> 5729

<211> 381

<212> DNA

<213> Homo sapiens

<400> 5729

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 120
 cagccagatg cgcctcaggt ctttctcgaa cttgatctgc aagacgcaga gagagggacc
 180
 gccaaagtaat tcgtggcaaa gaaacgtgtt ctcagcactt tgcctctcca gggccaagca
 240
 gggggccact cacctgcttg cgtctcaggc gtcctccttg gacctctctc cgcaggaacc
 300
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 360
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 381

<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

Phe	Val	Ala	Lys	Lys	Arg	Val	Leu	Ser	Thr	Leu	Pro	Ser	Gln	Gly	Gln
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Ala	Gly	Gly	His	Ser	Pro	Ala	Cys	Val	Ser	Gly	Val	Pro	Pro	Gly	Pro
			20				25					30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
		35				40					45				
Gly	Ser	Ser	Ser	Ala	Gly	Gly	Ser	Ser	Ala	Arg	Phe	Cys	Thr	Lys	Phe
	50				55						60				

<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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 120
 attttgtcag cacttgggaa cttcctggcc cagatgattg agaagaagcg gaaaaaagaa
 180
 aactctagaa gtctggatgt cgggtggcct ctgagatatg ccgtttacgg gttcttcttc
 240
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 780
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<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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 35 40 45
 Leu Ala Gln Met Ile Glu Lys Lys Arg Lys Lys Glu Asn Ser Arg Ser
 50 55 60
 Leu Asp Val Gly Gly Pro Leu Arg Tyr Ala Val Tyr Gly Phe Phe Phe
 65 70 75 80
 Thr Gly Pro Leu Ser His Phe Phe Tyr Phe Phe Met Glu His Trp Ile
 85 90 95
 Pro Pro Glu Val Pro Leu Ala Gly Leu Arg Arg Leu Leu Leu Asp Arg
 100 105 110
 Leu Val Phe Ala Pro Ala Phe Leu Met Leu Phe Phe Leu Ile Met Asn
 115 120 125
 Phe Leu Glu Gly Lys Asp Ala Ser Ala Phe Ala Ala Lys Met Arg Gly
 130 135 140
 Gly Phe Trp Pro Ala Leu Arg Met Asn Trp Arg Val Trp Thr Pro Leu
 145 150 155 160
 Gln Phe Ile Asn Ile Asn Tyr Val Pro Leu Lys Phe Arg Val Leu Phe
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 Ala Asn Leu Ala Ala Leu Phe Trp Tyr Ala Tyr Leu Ala Ser Leu Gly
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<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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<210> 5734

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5734

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Ile	Ser	Phe	Thr	Gly	Ala	Leu	Lys	Ile	Pro	Gly	Val	Ile	Glu	Phe	Ser
			20				25					30			
Leu	Cys	Leu	Leu	Phe	Ala	Lys	Leu	Val	Ser	Tyr	Thr	Phe	Leu	Phe	Trp
		35					40				45				
Leu	Pro	Leu	Tyr	Ile	Thr	Asn	Val	Asp	His	Leu	Asp	Ala	Lys	Lys	Ala
		50				55					60				
Gly	Cys	Thr	Gly	Ser	Pro	Asp	Pro	Leu	Arg	His	Ser	Ser	His	Arg	Thr
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Ser	Lys														

<210> 5735

<211> 4241

<212> DNA

<213> Homo sapiens

<400> 5735

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180
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240
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300
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600
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<210> 5736

<211> 327

<212> PRT

<213> Homo sapiens

<400> 5736

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 Thr Val Arg Gly Glu Arg Ser Tyr Ser Trp Gly Met Ala Val Asn Val
 35 40 45
 Tyr Ser Thr Ser Ile Thr Gln Glu Thr Met Ser Arg His Asp Ile Ile
 50 55 60
 Ala Trp Val Asn Asp Ile Val Ser Leu Asn Tyr Thr Lys Val Glu Gln
 65 70 75 80
 Leu Cys Ser Gly Ala Ala Tyr Cys Gln Phe Met Asp Met Leu Phe Pro
 85 90 95
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[illegible]

<210> 5737

<211> 340

<212> DNA

<213> Homo sapiens

<400> 5737

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180     tggctgaaca  tcaggggcaa  ggaggcggtg  gcccaatcca  tgttccatgt  ctccacgccg
240     ctgccagtga  tgaccgggtg  tttcctgatg  tacctgagag  ggcagctgga  gcctcagtg
300     aagatgttgc  agtgccatcc  tcacctgggt  gcttgaaatc  ggccaaggtg  ggagcattta
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<210> 5738

<211> 99

<212> PRT

<213> Homo sapiens

<400> 5738

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Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu
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Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
      20           25           30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
      35           40           45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
      50           55           60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
65           70           75           80
Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
      85           90           95
Gly Gly Xaa

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<210> 5739

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5739

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<210> 5740

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5740

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 20           25           30
Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
 35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
 50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
 65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
 85           90           95
Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
100          105          110
Phe Leu Gly Arg Ala Gln Pro Gln
115          120

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<210> 5741

<211> 2444

<212> DNA

<213> Homo sapiens

<400> 5741

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900

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<211> 427

<212> PRT

<213> Homo sapiens

<400> 5742

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 35 40 45
 Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe
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 Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Lys Gln Met Lys
 65 70 75 80
 Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly
 85 90 95
 Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu
 100 105 110
 Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr
 115 120 125
 Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile
 130 135 140
 Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr
 145 150 155 160
 Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn
 165 170 175
 Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn
 180 185 190
 Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu
 195 200 205
 Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala
 210 215 220
 Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp
 225 230 235 240
 Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu
 245 250 255
 Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys
 260 265 270
 Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala
 275 280 285
 Thr Cys Ser Ser Ala Thr Ala Ala Ser Ser Gly Leu Glu Glu Trp
 290 295 300
 Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His
 305 310 315 320
 Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
 325 330 335
 Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
 340 345 350
 Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
 355 360 365
 Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro
 370 375 380
 Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

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385                      390                      395                      400
Val Leu Ala Val Ser Gln Gln Glu Tyr Leu Asp Ser Met Lys Lys Asn
                      405                      410                      415
Lys Val His Arg Asp Pro Pro Pro Asp Lys Ser
                      420                      425

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<210> 5743
 <211> 550
 <212> DNA
 <213> Homo sapiens

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<400> 5743
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120
gcgtctcagg cgtccctcct ggaccttccc ctatctggct gggcggacac tggtaggatt
180
gcggtggagc cacatgtcct gcggtcccg tatecagtct gggcaggaag cagcggggccg
240
tgagccagct ctccaggggg ctgacggaca tcttctggg gaccagcatc tcctccagct
300
ccagctgggc ccccttgca gggagagagg ccgacctacc tgggcgggcc ggcgatgtgc
360
tgtaaagggg cccgcagacc cggctgcccc actccagaga cgggccaagg cgggcgggccg
420
ccgaaaggtc ccagaacggg gaggccggcc cctccccgg gttcaccccc gcgcgaatcg
480
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540
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550

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<210> 5744
 <211> 95
 <212> PRT
 <213> Homo sapiens

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<400> 5744
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Pro Cys Glu Gly Glu Arg Pro Pro Tyr Leu Gly Arg Pro Ala Met Cys
20      25      30
Cys Lys Gly Ala Arg Arg Pro Gly Cys Pro Thr Pro Glu Thr Gly Gln
35      40      45
Gly Gly Arg Pro Pro Lys Gly Pro Arg Thr Gly Arg Pro Ala Pro Ser
50      55      60
Pro Gly Ser Pro Pro Arg Glu Ser Arg Cys Leu Ala Pro Xaa Asp Pro
65      70      75      80
Leu Gly Trp Thr Pro Gly Pro Pro Ala Ala Pro Gly Ala Leu
85      90      95

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<210> 5745
 <211> 849

<212> DNA

<213> Homo sapiens

<400> 5745

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120
aggaagtgat gcagggcagg taaacagctg gtgctcagca gcgagaggac gcgtcactct
180
gccgttctgc aggggtgacgc cctccccgta cctcgctgag agccacctgc agacacagca
240
ggccacagca gaatgcacag gtcactgttg taggggaaca aatcgtaatg cccagagaaa
300
acctgatagt gaaatgtaaa cagacaggac aggggtggttc cagggtggcca ccaccgccag
360
gcccttcccg tgattgatct gagagcttca cagccggcgg cactgggacc catttccaga
420
aacactggaa caccaggtct ctcagatgcc cgccgggaggg gcccaggga ggcctttctc
480
agcatcagct tttgggtgac aaacccata cagcaaaact gtacaaatac acacaacgga
540
ccccagctg acagtgcagc caggacccta ggaaggtcag gtggtggtga agtcatcccc
600
tctccaaccg agcagagcct ggggttgggc tctgatgacc tcccgggcaa agtgtccagg
660
tggaggaagc aaactcccaa atggggcaca aaghtaataa aaagcagctg agagattgag
720
ggatggggtc ggggccactt ggccgacacc ttctgcctcg cctggccggg cggggccagg
780
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840
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849

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<210> 5746

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5746

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Met Thr Ser Pro Pro Asp Leu Pro Arg Val Leu Val Ser Leu Ser
1          5          10          15
Ala Gly Gly Pro Leu Cys Val Phe Val Gln Phe Cys Cys Met Gly Phe
20          25          30
Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro
35          40          45
Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro
50          55          60
Ser Ala Ala Gly Cys Glu Ala Leu Arg Ser Ile Thr Gly Arg Ala Trp
65          70          75          80
Arg Trp Trp Pro Pro Gly Thr Thr Leu Ser Cys Leu Phe Thr Phe His
85          90          95
Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp

```

	100		105		110
Leu Cys Ile	Leu Leu Trp Pro	Ala Val Ser Ala	Gly Gly Ser	Gln Arg	
	115	120	125		
Gly Thr Gly	Arg Ala Ser Pro	Cys Arg Thr Ala	Glu		
130	135	140			

<210> 5747

<211> 1999

<212> DNA

<213> Homo sapiens

<400> 5747

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120
actcggggcg cgggggaccc ggcccggtag ctccagcccc gctggggcag cgcgagcgag
180
gaggagccga gccgcgggca cagtggcacc actgcaagtg gaggtgagaa cgagcgtgag
240
gacctggagc aggagtggaa gcccccgat gaggagtga tcaagaaact ggtggatcag
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420
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480
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540
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ctggccaccc cccagaagaa tggaagggtg caagagaagg tgatggaaca cctgctcaag
660
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720
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780
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900
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960
ctgaacaaga gactcgagga gcttcagtag atgggtgatg agtcttctgc caacagctcc
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tctgaccccc agagcaaccc cacatcccc atggcggggc gacggcacgc ggccaccaac
1080
aagctcagcc cgtctggcca ccagaatctc tttctgagtc caaatgcctc ccgctgcaca
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1200
gaggaaggta gactgaactg cagcaccagc cctgagatct tccgcaagtg tatggattat
1260

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tcctctgaca gcagcgacac tccctctggc agccctggg tccggaggcg tcgccaagcc
 1320
 gagatgggga cccaggagaa aagccccggt acgagtcgcc tgctctcccg gaagatgcag
 1380
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 1620
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 1860
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 1980
 aaaaaaaaaa aaaaaaaaaa
 1999

<210> 5748

<211> 492

<212> PRT

<213> Homo sapiens

<400> 5748

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 20 25 30
 Glu Asp Glu Glu Gly Ala Glu Thr Arg Gly Ala Gly Asp Pro Ala
 35 40 45
 Arg Tyr Leu Ser Pro Gly Trp Gly Ser Ala Ser Glu Glu Glu Pro Ser
 50 55 60
 Arg Gly His Ser Gly Thr Thr Ala Ser Gly Gly Glu Asn Glu Arg Glu
 65 70 75 80
 Asp Leu Glu Gln Glu Trp Lys Pro Pro Asp Glu Glu Leu Ile Lys Lys
 85 90 95
 Leu Val Asp Gln Ile Glu Phe Tyr Phe Ser Asp Glu Asn Leu Glu Lys
 100 105 110
 Asp Ala Phe Leu Leu Lys His Val Arg Arg Asn Lys Leu Gly Tyr Val
 115 120 125
 Ser Val Lys Leu Leu Thr Ser Phe Lys Lys Val Lys His Leu Thr Arg
 130 135 140
 Asp Trp Arg Thr Thr Ala His Ala Leu Lys Tyr Ser Val Val Leu Glu
 145 150 155 160
 Leu Asn Glu Asp His Arg Lys Val Arg Arg Thr Thr Pro Val Pro Leu

```

165          170          175
Phe Pro Asn Glu Asn Leu Pro Ser Lys Met Leu Leu Val Tyr Asp Leu
180          185          190
Tyr Leu Ser Pro Lys Leu Trp Ala Leu Ala Thr Pro Gln Lys Asn Gly
195          200          205
Arg Val Gln Glu Lys Val Met Glu His Leu Leu Lys Phe Gly Thr
210          215          220
Phe Gly Val Ile Ser Ser Val Arg Ile Leu Lys Pro Gly Arg Glu Leu
225          230          235
Pro Pro Asp Ile Arg Arg Ile Ser Ser Arg Tyr Ser Gln Val Gly Thr
240          245          250
Gln Glu Cys Ala Ile Val Glu Phe Glu Glu Val Glu Ala Ala Ile Lys
255          260          265
Ala His Glu Phe Met Ile Thr Glu Ser Gln Gly Lys Glu Asn Met Lys
270          275          280
Ala Val Leu Ile Gly Met Lys Pro Pro Lys Lys Lys Pro Ala Lys Asp
285          290          295
Lys Asn His Asp Glu Glu Pro Thr Ala Ser Ile His Leu Asn Lys Ser
300          305          310
Leu Asn Lys Arg Val Glu Glu Leu Gln Tyr Met Gly Asp Glu Ser Ser
315          320          325
Ala Asn Ser Ser Ser Asp Pro Glu Ser Asn Pro Thr Ser Pro Met Ala
325          330          335
Gly Arg Arg His Ala Ala Thr Asn Lys Leu Ser Pro Ser Gly His Gln
340          345          350
Asn Leu Phe Leu Ser Pro Asn Ala Ser Pro Cys Thr Ser Pro Trp Ser
355          360          365
Ser Pro Leu Ala Gln Arg Lys Gly Val Ser Arg Lys Ser Pro Leu Ala
370          375          380
Glu Glu Gly Arg Leu Asn Cys Ser Thr Ser Pro Glu Ile Phe Arg Lys
385          390          395
Cys Met Asp Tyr Ser Ser Asp Ser Ser Val Thr Pro Ser Gly Ser Pro
400          405          410
Trp Val Arg Arg Arg Arg Gln Ala Glu Met Gly Thr Gln Glu Lys Ser
415          420          425
Pro Gly Thr Ser Pro Leu Leu Ser Arg Lys Met Gln Thr Ala Asp Gly
430          435          440
Leu Pro Val Gly Val Leu Arg Leu Pro Arg Gly Pro Asp Asn Thr Arg
445          450          455
Gly Phe His Gly His Glu Arg Ser Arg Ala Cys Val
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475          480
485          490

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<210> 5749

<211> 2849

<212> DNA

<213> Homo sapiens

<400> 5749

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120
gaaataaaac ccatttcaaa agttattgga aagaaagtaa ggtatggctc ttatgggtta
180

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actagtggtg gtcagtttct gctttttact ccctctgaat tattaattgt ttgccaggtt
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480
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600
cgtcataaca acatcaccag catttccacg ggcagttttt ccacaactcc aaatttgaag
660
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720
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1740
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1800

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1920
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1980
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2849

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<210> 5750

<211> 522

<212> PRT

<213> Homo sapiens

<400> 5750

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Arg Pro Gly Cys Arg Glu Leu Leu Cys Leu Leu Met Ile Thr Val Thr
      20           25           30
Val Gly Pro Gly Ala Ser Gly Val Cys Pro Thr Ala Cys Ile Cys Ala
      35           40           45
Thr Asp Ile Val Ser Cys Thr Asn Lys Asn Leu Ser Lys Val Pro Gly
      50           55           60
Asn Leu Phe Arg Leu Ile Lys Arg Leu Asp Leu Ser Tyr Asn Arg Ile
      65           70           75           80
Gly Leu Leu Asp Ser Glu Trp Ile Pro Val Ser Phe Ala Lys Leu Asn

```

85										90										95									
Thr	Leu	Ile	Leu	Arg	His	Asn	Asn	Ile	Thr	Ser	Ile	Ser	Thr	Gly	Ser														
100										105										110									
Phe	Ser	Thr	Thr	Pro	Asn	Leu	Lys	Cys	Leu	Asp	Leu	Ser	Ser	Asn	Lys														
115										120										125									
Leu	Lys	Thr	Val	Lys	Asn	Ala	Val	Phe	Gln	Glu	Leu	Lys	Val	Leu	Glu														
130										135										140									
Val	Leu	Leu	Leu	Tyr	Asn	Asn	His	Ile	Ser	Tyr	Leu	Asp	Pro	Ser	Ala														
145										150										155									
Phe	Gly	Gly	Leu	Ser	Gln	Leu	Gln	Lys	Leu	Tyr	Leu	Ser	Gly	Asn	Ph														
165										170										175									
Leu	Thr	Gln	Ph	Pro	Met	Asp	Leu	Tyr	Val	Gly	Arg	Phe	Lys	Leu	Ala														
180										185										190									
Glu	Leu	Met	Phe	Leu	Asp	Val	Ser	Tyr	Asn	Arg	Ile	Pro	Ser	Met	Pro														
195										200										205									
Met	His	His	Ile	Asn	Leu	Val	Pro	Gly	Lys	Gln	Leu	Arg	Gly	Ile	Tyr														
210										215										220									
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515

520

<210> 5751

<211> 926

<212> DNA

<213> Homo sapiens

<400> 5751

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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 540
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 926

<210> 5752

<211> 129

<212> PRT

<213> Homo sapiens

<400> 5752

Met Gly Asp Pro Val Val Thr Glu Thr Pro Thr Leu Leu Gly Leu Pro
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 20 25 30
 Leu Glu Ile Arg Ser Val His Val Gly Val Val Val Ile Lys Ala Val
 35 40 45
 Ser Ser Gly Phe Tyr Val Ala Met Asn Arg Arg Gly Arg Leu Tyr Gly

50		55		60
Ser Arg Leu Tyr Thr Val Asp Cys Arg Phe Arg Glu Arg Ile Glu Glu				
65	70	75	80	
Asn Gly His Asn Thr Tyr Ala Ser Gln Arg Trp Arg Arg Arg Gly Gln				
	85	90	95	
Pro Met Phe Leu Ala Leu Asp Arg Arg Gly Gly Pro Arg Pro Gly Gly				
	100	105	110	
Arg Thr Arg Arg Tyr His Leu Ser Ala His Phe Leu Pro Val Leu Val				
	115	120	125	
Ser				

<210> 5753

<211> 5668

<212> DNA

<213> Homo sapiens

<400> 5753

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120
acttgcttgg gcacaacagc tttgtctttt acccagagga gcaaaagcaa atcagaagct
180
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240
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300
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360
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420
cagaagagaa gttttcctga ccaggttacg gattgcaagc ccccgctccc tgcccaggaa
480
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600
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720
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900
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960
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1020
gatagtgatt caaatatgga tcttatgcca ggaattctga aacagccatc cctgacactt
1080

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1320
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1380
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<210> 5754

<211> 221

<212> PRT

<213> Homo sapiens

<400> 5754

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Phe Pro Asn His Thr Asp Asn Leu Asn Ser Ser Gln Arg Leu Ser Pro
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Ser Ser Arg Met Arg Lys Leu Pro Gln Gly Arg Pro Val Pro Pro Leu
      50           55           60
Gly Pro Glu Thr Arg Val Ser Val Val Trp Val Glu Arg Tyr Asp Asp
      65           70           75           80
Ile Glu Asn Phe Pro Leu Ser Glu Leu Met Thr Glu Ile Ser Thr Gly
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Val Glu Thr Thr Ala Asn Ser Ser Thr Ser Leu Arg Ser Thr Thr Leu
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Glu Lys Glu Val Pro Val Ile Phe Ile His Pro Leu Asn Thr Gly Leu
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Pro Leu Val Asp Gly Met Ile Val Ser Arg Arg Ala Leu Gly Phe Leu
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Val Arg Gln Thr Val Ile Asn Ile Cys Arg Arg Lys Arg Leu Glu Ser
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Asp Ser Tyr Ser Pro Pro His Val Arg Arg Lys Gln Lys Ile Thr Asp
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<211> 1513

<212> DNA

<213> Homo sapiens

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<211> 415

<212> PRT

<213> Homo sapiens

<400> 5756

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Asn Leu His Asn Pro Ala Leu Phe Glu Gly Arg Ser Pro Ala Val Trp
      180              185              190
Glu Leu Ala Glu Glu Tyr Leu Asp Ile Val Arg Glu His Pro Cys Pro
195              200              205
Leu Ser Tyr Val Arg Ala His Leu Phe Lys Leu Trp His His Thr Leu
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Gln Val His Gln Glu Leu Arg Glu Glu Leu Ala Lys Val Lys Thr Leu
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<211> 2362

<212> DNA

<213> Homo sapiens

<400> 5757

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<211> 440

<212> PRT

<213> Homo sapiens

<400> 5758

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<211> 1333

<212> DNA

<213> Homo sapiens

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<210> 5760

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5760

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<213> Homo sapiens

<400> 5762

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<210> 5763

<211> 3840

<212> DNA

<213> Homo sapiens

<400> 5763

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<210> 5764

<211> 466

<212> PRT

<213> Homo sapiens

<400> 5764

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Arg Pro Val Asn Leu Thr Glu Val Thr Thr Leu Gln Gln Arg Leu Leu
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<211> 3220

<212> DNA

<213> Homo sapiens

<400> 5765

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<211> 873

<212> PRT

<213> Homo sapiens

<400> 5766

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Leu	Lys	Pro	Ser	Gly	Gln	Val	Leu	Thr	Ser	Thr	Glu	Ser	Leu	Cys	Arg
		195					200					205			
Leu	Arg	Gly	Arg	Val	Ala	Leu	Ala	Asp	Ile	Ala	Phe	Thr	Gly	Gly	Gly
		210				215					220				
Asn	Ile	Val	Val	Ala	Thr	Ala	Asp	Gly	Ser	Ser	Ala	Ser	Pro	Val	Gln
225					230					235				240	
Phe	Tyr	Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp
			245						250					255	
Thr	Glu	Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn
			260					265					270		
Arg	Lys	Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg
			275				280					285			
Asp	Met	Ser	Glu	Gln	Val	Leu	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser
			290				295					300			
Ile	Val	Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn
305					310					315				320	
Ile	Phe	Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile
			325						330					335	
Leu	Lys	Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser

340 345 350
 Ala Val Ala Leu Pro Lys Leu Pro Ile Ser Leu Thr Asn Thr Asp Leu
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 Lys Val Ala Ser Asp Thr Gln Phe Tyr Pro Gly Leu Gly Leu Ala Leu
 370 375 380
 Ala Phe His Asp Gly Ser Val His Ile Val His Arg Leu Ser Leu Gln
 385 390 395 400
 Thr Met Ala Val Phe Tyr Ser Ser Ala Ala Pro Arg Pro Val Asp Glu
 405 410 415
 Pro Ala Met Lys Arg Pro Arg Thr Ala Gly Pro Ala Val His Leu Lys
 420 425 430
 Ala Met Gln Leu Ser Trp Thr Ser Leu Ala Leu Val Gly Ile Asp Ser
 435 440 445
 His Gly Lys Leu Ser Val Leu Arg Leu Ser Pro Ser Met Gly His Pro
 450 455 460
 Leu Glu Val Gly Leu Ala Leu Arg His Leu Leu Phe Leu Leu Glu Tyr
 465 470 475 480
 Cys Met Val Thr Gly Tyr Asp Trp Trp Asp Ile Leu Leu His Val Gln
 485 490 495
 Pro Ser Met Val Gln Ser Leu Val Glu Lys Leu His Glu Glu Tyr Thr
 500 505 510
 Arg Gln Thr Ala Ala Leu Gln Gln Val Leu Ser Thr Arg Ile Leu Ala
 515 520 525
 Met Lys Ala Ser Leu Cys Lys Leu Ser Pro Cys Thr Val Thr Arg Val
 530 535 540
 Cys Asp Tyr His Thr Lys Leu Phe Leu Ile Ala Ile Ser Ser Thr Leu
 545 550 555 560
 Lys Ser Leu Leu Arg Pro His Phe Leu Asn Thr Pro Asp Lys Ser Pro
 565 570 575
 Gly Asp Arg Leu Thr Glu Ile Cys Thr Lys Ile Thr Asp Val Asp Ile
 580 585 590
 Asp Lys Val Met Ile Asn Leu Lys Thr Glu Glu Phe Val Leu Asp Met
 595 600 605
 Thr His Cys Arg Arg Cys Ser Ser Ser Cys Ser Gly Trp Ala Thr Ser
 610 615 620
 Cys Cys Thr Cys Trp Pro Ala Tyr Pro Thr Ser Pro Ala Pro Pro Arg
 625 630 635 640
 Ser Pro Ala Pro Pro Arg Ser Pro Pro Pro Pro Arg Ser Pro Pro Pro
 645 650 655
 Pro Arg Ser Pro Pro Leu His Glu Ala Ser Ala Gly Ser Leu Leu Arg
 660 665 670
 Pro Gly His Ser Phe Leu Arg Asp Gly Thr Ser Leu Gly Met Leu Arg
 675 680 685
 Glu Leu Met Val Val Ile Arg Ile Trp Gly Leu Leu Lys Pro Ser Cys
 690 695 700
 Leu Pro Val Tyr Thr Ala Thr Ser Asp Thr Gln Asp Ser Met Ser Leu
 705 710 715 720
 Leu Phe Arg Leu Leu Thr Lys Leu Trp Ile Cys Cys Arg Asp Glu Gly
 725 730 735
 Pro Ala Ser Glu Pro Asp Glu Ala Leu Val Asp Glu Cys Cys Leu Leu
 740 745 750
 Pro Ser Gln Leu Leu Ile Pro Ser Leu Asp Trp Leu Pro Ala Ser Asp
 755 760 765
 Gly Leu Val Ser Arg Leu Gln Pro Lys Gln Pro Leu Arg Leu Gln Phe

770		775		780
Gly Arg Ala Pro Thr	Leu Pro Gly Ser Ala Ala	Thr Leu Gln Leu Asp		
785	790	795	800	
Gly Leu Ala Arg Ala	Pro Gly Gln Pro Lys Ile	Asp His Leu Arg Arg		
	805	810	815	
Leu His Leu Gly Ala Cys	Pro Thr Glu Cys Lys Ala Cys	Thr Arg		
	820	825	830	
Cys Gly Cys Val Thr Met	Leu Lys Ser Pro Asn Arg Thr Thr	Ala Val		
	835	840	845	
Lys Gln Trp Glu Gln Arg	Trp Ile Lys Asn Cys	Leu Cys Gly Gly Leu		
	850	855	860	
Trp Trp Arg Val Pro	Leu Ser Tyr Pro			
865	870			

<210> 5767

<211> 1910

<212> DNA

<213> Homo sapiens

<400> 5767

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120
tcagtatcgt ggggttttgc tctattctga agggatcccc catcacgctg gcagctgtgt
180
gccaggagag accctgaggg ctgcctcacc acagcaggaa cgcccttctc agtccagcc
240
caatcctctc tcacactgcg gtgctctgtc cctatgaaa cagcctctgt atgtgtgtgt
300
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360
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420
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480
aaataagtga aaaggcattg agagattgct aagatttgtt aagttaaaac aataatatat
540
ctagaaaaga ctgtgaaaat atatatctca aaagagaaca aggcatagtc agaaggctca
600
gtaaaaaact tactttaaaa gctgactaat aaaaagggta agtgaaagaa ctcttccatc
660
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720
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780
cttggttaacc tgaattctct ctctgatcaa ggcagctgat ggactttcaa tgtatttgga
840
gatgccgggt caaaaacgtc atcatcatct tctgctcctt ctcttatcgg tttcatcttg
900
gcagaggctc gctggtgtgg ggaatgacaca tgaagagagg acatgctgga ggtactccga
960
agaaactggg gcaagccgtc gtcactgtca ctggagctgg ctatactgtt cctcatttcc
1020

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aacatggaga tctgtgtgca gaggtgtgagc tcatgttcca gctttttggc tttcttatca
 1080
 ttttaagggtg gatcattcaa tgagtagagc ttattttgtga tgtctttttcc aataagatac
 1140
 ctaaagattt catacaagaa aggtttctgat tccagaaagt atgttaattct tttctttgac
 1200
 cagcataaaa atctgcagtt atcatctgca ataattggtga cctggaattt ttcacctttg
 1260
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 1320
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 1380
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 1440
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 1500
 cgccgggtaca tgccactgag ttcccttttca atctttaccg gtctcttctt gtataaaga
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 tacgacagat gcaaaatggt gacacccaag aacacagagt tccagatcat tatatccaag
 1620
 gcacatcgtg agagagtggc ccagacgata taaagggtac atcttagagt taacattccc
 1680
 ctaagaataa tcatatgaag gtgaagagta gttggaataa ccaacccaac tgcaaaacaa
 1740
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 1800
 ttggaaggca caggtatgat actttctaac tcaggtgtaa aacctatggc agttgattct
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<210> 5768

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5768

Met	Asn	Tyr	Thr	Glu	Ser	Ser	Pro	Leu	Arg	Glu	Ser	Thr	Ala	Ile	Gly
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Phe	Thr	Pro	Glu	Leu	Glu	Ser	Ile	Ile	Pro	Val	Pro	Ser	Asn	Lys	Thr
			20					25					30		
Thr	Cys	Glu	Asn	Trp	Arg	Glu	Ile	His	His	Leu	Val	Phe	His	Val	Ala
		35				40						45			
Asn	Ile	Cys	Phe	Ala	Val	Gly	Leu	Val	Ile	Pro	Thr	Thr	Leu	His	Leu
	50				55					60					
His	Met	Ile	Phe	Leu	Arg	Gly	Met	Leu	Thr	Leu	Gly	Cys	Thr	Leu	Tyr
65				70					75					80	
Ile	Val	Trp	Ala	Thr	Leu	Tyr	Arg	Cys	Ala	Leu	Asp	Ile	Met	Ile	Trp
			85					90					95		
Asn	Ser	Val	Phe	Leu	Gly	Val	Asn	Ile	Leu	His	Leu	Ser	Tyr	Leu	Leu
		100					105						110		
Tyr	Lys	Lys	Arg	Pro	Val	Lys	Ile	Glu	Lys	Glu	Leu	Ser	Gly	Met	Tyr
		115				120						125			
Arg	Arg	Leu	Phe	Glu	Pro	Leu	Arg	Val	Pro	Pro	Asp	Leu	Phe	Arg	Arg

130						135						140					
Leu	Thr	Gly	Gln	Phe	Cys	Met	Ile	Gln	Thr	Leu	Lys	Lys	Gly	Gln	Thr		
145					150					155					160		
Tyr	Ala	Ala	Glu	Asp	Lys	Thr	Ser	Val	Asp	Arg	Leu	Ser	Ile	Leu			
				165					170				175				
Leu	Lys	Gly	Lys	Met	Lys	Val	Ser	Tyr	Arg	Gly	His	Phe	Leu	His	Asn		
			180					185				190					
Ile	Tyr	Pro	Cys	Ala	Phe	Ile	Asp	Ser	Pro	Glu	Phe	Arg	Ser	Thr	Gln		
	195						200					205					
Met	His	Lys	Gly	Glu	Lys	Phe	Gln	Val	Thr	Ile	Ile	Ala	Asp	Asp	Asn		
210						215					220						
Cys	Arg	Phe	Leu	Cys	Trp	Ser	Arg	Glu	Arg	Leu	Thr	Tyr	Phe	Leu	Glu		
225				230					235					240			
Ser	Glu	Pro	Phe	Leu	Tyr	Glu	Ile	Phe	Arg	Tyr	Leu	Ile	Gly	Lys	Asp		
			245					250					255				
Ile	Thr	Asn	Lys	Leu	Tyr	Ser	Leu	Asn	Asp	Pro	Thr	Leu	Asn	Asp	Lys		
		260					265					270					
Lys	Ala	Lys	Lys	Leu	Glu	His	Gln	Leu	Ser	Leu	Cys	Thr	Gln	Ile	Ser		
		275					280					285					
Met	Leu	Glu	Met	Arg	Asn	Ser	Ile	Ala	Ser	Ser	Ser	Asp	Ser	Asp	Asp		
	290				295					300							
Gly	Leu	His	Gln	Phe	Leu	Arg	Ser	Thr	Ser	Ser	Met	Ser	Ser	Leu	His		
305				310					315					320			
Val	Ser	Ser	Pro	His	Gln	Arg	Ala	Ser	Ala	Lys	Met	Lys	Pro	Ile	Glu		
			325					330					335				
Glu	Gly	Ala	Glu	Asp	Asp	Asp	Val	Phe	Glu	Pro	Ala	Ser	Pro	Asn			
		340					345					350					
Thr	Leu	Lys	Val	His	Gln	Leu	Pro										
	355					360											

<210> 5769

<211> 427

<212> DNA

<213> Homo sapiens

<400> 5769

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 180
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 240
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 300
 cagtacagag ttgtacaaga ggaaaaccag gtaagttcta cgtgtgttta cctttattgg
 360
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 427

<210> 5770

<211> 85

<212> PRT

<213> Homo sapiens

<400> 5770

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Lys Asp Val Glu Val Lys Glu Ser Lys Leu Ser Ser Ser Met Asn Ser
                20             25             30
Ile Lys Ile Phe Trp Gly Pro Glu Leu Lys Lys Glu Arg Ala Leu Arg
 35             40             45
Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val
 50             55             60
Val Gln Glu Glu Asn Gln Val Ser Ser Thr Cys Val Tyr Leu Tyr Trp
 65             70             75             80
Leu Asn Ser Cys Ile
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<210> 5771

<211> 2539

<212> DNA

<213> Homo sapiens

<400> 5771

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120
gtcagatgtg ccaccccgcc acaactggcc aatgggggtg cggaaggcct ggactatggc
180
ttcatgaagg aagtaacatt ccactgtcat gggctacatc ttgcacgggt ctccaaaact
240
cacctgtcag tcagaggcaa ctgggatgca gagattcctc tctgtaaacc agtcaactgt
300
ggacctcctg aagatcttgc ccatgggttc cctaattggt ttccctttat tcatgggggc
360
catatacagt atcagtgcct tcctggttat aagctccatg gaaattcatc aagaagggtg
420
ctctccaatg gctcctggag tggcagctca ccttccctgc tgctctgcag atgttccaca
480
ccagtaattg aatatggaac tgtcaatggg acagattttg actgtggaaa ggcagcccg
540
attcagtgtc tcaaaggcct caagctccta ggactttctg aaatcacctg tgaagccgat
600
ggccagtggg gctctgggtt cccccactgt gaacacactt cttgtgggtc tcttccaatg
660
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720
tgcaggctct gatatgtcat acaaggcagt tcagatctga tttgtacaga gaaaggggtg
780
tggaaccagc cttatccagt ctgtgagccc ttgtcctgtg gggtcccccacc gtctgtcgcc
840
aatgcagtgg caactggaga ggcacacacc tatgaaagtg aagtgaaact cagatgtctg
900

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gaaggttata cgatggatac agatacagat acaatcacct gtcagaaaaga tggtcgctgg
960
ttccctgaga gaattctctg cagtcctaaa aaatgtcctc tcccggaaaa cataacacat
1020
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1080
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1140
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1200
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1260
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1560
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1680
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1980
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2040
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2100
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2160
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2280
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2400
atattaaata gatgtgtctc taccctcaca aaatgtacat attctgtgtg ctattgggaa
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<210> 5772

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

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Cys Leu Ala Asn Gly Ser Trp Ser Gly Ala Thr Pro Asp Cys Val Pro
 20          25          30
Val Arg Cys Ala Thr Pro Pro Gln Leu Ala Asn Gly Val Thr Glu Gly
 35          40          45
Leu Asp Tyr Gly Phe Met Lys Glu Val Thr Phe His Cys His Gly Leu
 50          55          60
His Leu Ala Arg Cys Ser Lys Thr His Leu Ser Val Arg Gly Asn Trp
 65          70          75          80
Asp Ala Glu Ile Pro Leu Cys Lys Pro Val Asn Cys Gly Pro Pro Glu
 85          90          95
Asp Leu Ala His Gly Phe Pro Asn Gly Phe Ser Phe Ile His Gly Gly
100          105          110
His Ile Gln Tyr Gln Cys Phe Pro Gly Tyr Lys Leu His Gly Asn Ser
115          120          125
Ser Arg Arg Cys Leu Ser Asn Gly Ser Trp Ser Gly Ser Ser Pro Ser
130          135          140
Cys Leu Pro Cys Arg Cys Ser Thr Pro Val Ile Glu Tyr Gly Thr Val
145          150          155          160
Asn Gly Thr Asp Phe Asp Cys Gly Lys Ala Ala Arg Ile Gln Cys Phe
165          170          175
Lys Gly Phe Lys Leu Leu Gly Leu Ser Glu Ile Thr Cys Glu Ala Asp
180          185          190
Gly Gln Trp Ser Ser Gly Phe Pro His Cys Glu His Thr Ser Cys Gly
195          200          205
Ser Leu Pro Met Ile Pro Asn Ala Phe Ile Ser Glu Thr Ser Ser Trp
210          215          220
Lys Glu Asn Val Ile Thr Tyr Ser Cys Arg Ser Gly Tyr Val Ile Gln
225          230          235          240
Gly Ser Ser Asp Leu Ile Cys Thr Glu Lys Gly Val Trp Asn Gln Pro
245          250          255
Tyr Pro Val Cys Glu Pro Leu Ser Cys Gly Ser Pro Pro Ser Val Ala
260          265          270
Asn Ala Val Ala Thr Gly Glu Ala His Thr Tyr Glu Ser Glu Val Lys
275          280          285
Leu Arg Cys Leu Glu Gly Tyr Thr Met Asp Thr Asp Thr Asp Thr Ile
290          295          300
Thr Cys Gln Lys Asp Gly Arg Trp Phe Pro Glu Arg Ile Ser Cys Ser
305          310          315          320
Pro Lys Lys Cys Pro Leu Pro Glu Asn Ile Thr His Ile Leu Val His
325          330          335
Gly Asp Asp Phe Ser Val Asn Arg Gln Val Ser Val Ser Cys Ala Glu
340          345          350
Gly Tyr Thr Phe Glu Gly Val Asn Ile Ser Val Cys Gln Leu Asp Gly

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Thr Trp Glu Pro Pro Phe Ser Asp Glu Ser Cys Ser Pro Val Ser Cys
  370              375              380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr
  385              390              395              400
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu
      405              410              415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly
      420              425              430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe
      435              440              445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val
      450              455              460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala
      465              470              475              480
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys
      485              490              495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu
      500              505
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg
      515              520              525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp
      530              535              540
Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly
      545              550              555
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln
      565              570              575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu
      580              585              590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro
      595              600              605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His
      610              615              620
Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala
      625              630              635              640
Pro Leu

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<210> 5773

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5773

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120
agcccggtccc ggtcgcgatc ccgggacaag gagcgcgtgc ggaagcgttc caaatctcgg
180
gaaagtaaac ggaaccggcg gcgggagtcg cggtcccgtt cgcgctccc caacacggcc
240
gtgtcccggc gcgagcggga ccgggagcgc cctcgtcccc gcccgaccgc atcgacatct
300

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tcgggcgcac ggtgagcaag cgcagcagcc tggacgagaa gcagaagcga gagggaggag
 360
 agaagaaagc ggagttcgag cggcagcgaa aaattcgaca gcaagaaata gaagaaaaac
 420
 tcctcgagga agaaacagca cgaagagtag aagaattggt agcaanaaag ggtggaggaa
 480
 gaactggaga aaaggaagga tgaattgaa cgagaagttc tccgaagggt ggaggaagcc
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<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

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			20					25					30		
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35					40					45			
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
		50				55					60				
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65					70					75				80	
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
			85					90					95		
Ala	Ser	Thr	Ser	Ser	Gly	Ala	Arg								
			100												

<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 caccggggac acctggaacc cagcaccacg agcctcagct tcacctccat gggcatcaac
 180
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 240
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 300
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 420
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 480

ctctgtgcagc aagcagcggc cggggcccag ggtgcgccc agcgggctgc cgagctggga
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 gcctgcggca agagtgttaa gtataactcg ctgctcctag agcaccagcg catccacacg
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 780
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 960
 cgctcgact tcttcgggca caaccgcaca cacacgggag agaagcccta ccactgcctc
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 1080
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 1260
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 1320
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 1440
 a
 1441

<210> 5776

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5776

Met Gly Ile Asn Met Pro Lys Val Leu Ser Gln Pro Ser Asp Leu Asp
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 Leu Gln Asp Val Glu Glu Val Glu Ile Gly Arg Asp Thr Phe Trp Pro
 20 25 30
 Asp Ser Glu Pro Lys Pro Glu Gln Ala Pro Arg Ser Pro Gly Ser Gln
 35 40 45
 Ala Pro Asp Glu Gly Ala Gly Gly Ala Leu Arg Thr Ser Val Arg Ser
 50 55 60
 Leu Pro Arg Arg Ala Arg Cys Ser Ala Gly Phe Gly Pro Glu Ser Ser
 65 70 75 80
 Ala Glu Arg Pro Ala Gly Gln Pro Pro Gly Ala Val Pro Cys Ala Gln
 85 90 95
 Pro Arg Gly Ala Trp Arg Val Thr Leu Val Gln Gln Ala Ala Ala Gly

```

          100          105          110
Pro Glu Gly Ala Pro Glu Arg Ala Ala Glu Leu Gly Val Asn Phe Gly
          115          120          125
Arg Ser Arg Gln Gly Ser Ala Arg Gly Thr Lys Pro His Arg Cys Glu
          130          135          140
Ala Cys Gly Lys Ser Phe Lys Tyr Asn Ser Leu Leu Lys His Gln
145          150          155
Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys His Glu Cys Gly Lys
          165          170          175
Cys Phe Ala Ala Ala Ser Arg Phe Ile Gln His Gln Arg Ile His Ser
          180          185          190
Gly Glu Lys Pro Tyr Ala Cys Pro Glu Cys Ser Lys Thr Phe Thr Arg
          195          200          205
Ser Ser Asn Leu Ile Lys His Gln Val Ile His Ser Gly Glu Arg Pro
210          215          220
Phe Ala Cys Gly Asp Cys Gly Lys Leu Phe Arg Arg Ser Phe Ala Leu
225          230          235          240
Leu Glu His Ala Arg Val His Ser Gly Glu Lys Pro Tyr Glu Cys Ser
          245          250          255
Asp Cys Gly Lys Cys Phe Arg Gly Arg Ser His Phe Phe Arg His Asn
          260          265          270
Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Leu Asp Cys Gly Lys
275          280          285
Ser Phe Ser His Ser Ser His Leu Ile Lys His Gln Arg Thr His Arg
290          295          300
Gly Val Arg Pro Tyr Ala Cys Pro Leu Cys Gly Lys Ser Phe Ser Arg
305          310          315          320
Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys
          325          330          335
Ala Leu Ala Met Leu Met Leu Gly Ala Ala Ala Gly Ala Leu Ala
          340          345          350
Thr Pro Pro Pro Ala Pro Thr
355

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<210> 5777

<211> 1431

<212> DNA

<213> Homo sapiens

<400> 5777

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120
tgctgctggc ctgcctcaag caaccaggta cgtaggctcg cggcccagct cggcgctggc
180
gtgggagccg gagggcgaca gtcagagccg ggggtgccagc gggacgcgac cgccagatcc
240
acttaggacc ccgtcgttct gcgaagcggc cacgtctgag tccgggggac tcctcgtgct
300
gcagatgtcg ccttaggacc tcggccagga tacctctctg catgctcttg tgctgcccgt
360
gatcacgcac tggcccttgt aagcaccttc gcagcaggaa gccacagact ggcctgcgcc
420

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tttctgaagg ctgtggaaga ggttggagtg ggcgcattct agcttgcccc atccccattt
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 540
 gtcagtgtgc caccctcttg gcaggccccc attgaggccc ggggcccga gacggcctcg
 600
 gccaacatct tccaggagcg cgagctgtcg cagatccaag ccctgtttca acgcagcggg
 660
 gaccagctgg ccgagggaacg ggcacagatc atctgggaat gtgcagggga ccaccgtgtg
 720
 gctgaggccc tcaagaggct gcgcaggaag agggccccc aa ggcagaaacc ccctggggca
 780
 ctgcgtacac cactgcagcc gcctcagaat cctggagccc cactctgcac tggccaacct
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 960
 ctgatccagg gaaagagcca ggaatggcag tgtcttccct cttgccaaaa ggcctgggga
 1020
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 1080
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 1140
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 1200
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 1260
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 1320
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 1431

<210> 5778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 5778

Met Leu Thr Leu Lys Gly Ser Ser Asp Arg Pro Gln Met Gly Met Gly
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 Gln Ala Lys Met Arg Pro Leu Gln Pro Leu Pro Gln Pro Ser Glu Arg
 20 25 30
 Ala Gly Ala Ala Leu Gly Phe Leu Leu Arg Arg Cys Leu Gln Gly Pro
 35 40 45
 Val Gly Asp His Gly Gln His Lys Ser Met Ala Glu Gly Ile Leu Ala
 50 55 60
 Glu Val Leu Arg Arg His Leu Gln His Glu Glu Ala Pro Gly Leu Arg
 65 70 75 80
 Arg Gly Arg Phe Ala Glu Arg Arg Gly Pro Lys Trp Ile Trp Arg Ser
 85 90 95
 Arg Pro Ala Gly Thr Pro Ala Leu Thr Val Ala Leu Arg Leu Pro Pro


```

          100              105              110
Gln Arg Arg Ala Gly Pro Pro Thr Tyr Val Pro Gly Cys Leu Arg Gln
          115              120              125
Ala Ala Arg Ser Pro Lys Leu Val Arg Ala Thr Trp Val Thr Ala Ala
          130              135              140
Val Pro Gly Arg Lys Arg Ser Leu Ala Pro Glu Gln Pro Ile Leu Gly
          145              150              155              160
Pro Ser Gln Val

```

<210> 5779

<211> 371

<212> DNA

<213> Homo sapiens

<400> 5779

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cgggagagag ggggtgatttc agccttgctc gccatccctt gtgtctgcnt gaggggtgtgt
120
gcacacggga atgtgtgctg gtgtgtgtgc gtgcattcag ctgtgtgtgg atgtgcantc
180
gtgtgtgggt gtgtagggtg gtgtgggtgt gtgcaccagt gcagggtgtgc atgggtgtgtg
240
acagggtgggt gtgtgtatgt gtgtgggggt gtgcccattc gtgcagggtgt gtgggtgtgtg
300
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360
gtgtgcagtg t
371

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<210> 5780

<211> 123

<212> PRT

<213> Homo sapiens

<400> 5780

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Leu Leu Arg Arg Val Glu Gly Arg Lys Gly Arg Thr His Asp Leu Pro
 1          5          10          15
Gln Arg His Gly Arg Glu Arg Gly Val Ile Ser Ala Leu Ser Gly Ile
          20          25          30
Pro Cys Val Cys Xaa Arg Val Cys Ala His Gly Asn Val Cys Gly Cys
          35          40          45
Val Cys Val His Ala Ala Val Cys Gly Cys Ala Xaa Val Cys Gly Cys
          50          55          60
Val Gly Val Cys Gly Cys Val His Gln Cys Arg Cys Ala Trp Val Cys
          65          70          75          80
Thr Gly Gly Cys Val Tyr Val Cys Gly Gly Val Pro Ile Cys Ala Gly
          85          90          95
Val Trp Val Cys Arg Val Xaa Cys Leu Cys Val Gly Val Xaa Pro Cys
          100          105          110
Val Pro Leu Trp Arg Cys Val Gly Val Cys Ser
          115          120

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<210> 5781

<211> 845

<212> DNA

<213> Homo sapiens

<400> 5781

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 120
 ccaccagggt aggatggcac tgcaacatct tccactgagg ctccagctgc cctctcagggt
 180
 acatcagggc ctggancgtc ctctctcca ggagggccag gactcgcccc cctgccagcc
 240
 cccgaagcat tgcagccagg agtgcagcgt gggggccctg caggccatgg ccaggcccca
 300
 gcgccaccag caccagggtc ggctggaagc cataggccag gggcagcacc aagcccaaga
 360
 tgcagctcag gaaaccaccg gtcatcactg gcagtggcgt ggagacatgg aacatggata
 420
 gggcagccgc ctctctgccc ctgatgttca gccacagact cctcccgta tgggcgagggt
 480
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 540
 caggacaggt gttcatgttg tccagagtcc attcccagaa ctctctgtgc ttggccagcc
 600
 aggatagggg tgcccacagg tcttgccgtc agaggctcag gatggccaag tgaggcttac
 660
 ctctggggctc cgtgggacag gcctctccga acagccacat ccagggtggc tgctgcagca
 720
 gaggtggag tggctgctat accactgttc acctgtggga tgaataaaca gtggagaatg
 780
 aggcaccaac caactcccaa gccaggtaaa cagatccaca gtcccttca ttccgtgtgt
 840
 ctctg
 845

<210> 5782

<211> 147

<212> PRT

<213> Homo sapiens

<400> 5782

Gly Val Pro Cys Pro Lys Ile Glu Gly Ala Val Gly Leu Gly Ser Gly
 1 5 10 15
 Ser Arg Pro Arg Gly Ala Gly Val Arg Cys His Phe Cys Gly Val Asn
 20 25 30
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala
 35 40 45
 Thr Ser Ser Thr Glu Ala Pro Ala Leu Ser Gly Thr Ser Gly Pro
 50 55 60
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala
 65 70 75 80
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

```

      85              90              95
Gly Gln Ala Pro Ala Pro Pro Ala Pro Gly Gln Ala Gly Ser His Arg
      100              105              110
Pro Gly Ala Ala Pro Ser Pro Arg Cys Ser Ser Gly Asn His Arg Ser
      115              120              125
Ser Leu Ala Val Ala Trp Arg His Gly Thr Trp Ile Gly Gln Pro Pro
      130              135              140
Pro Cys Pro
145

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<210> 5783

<211> 1839

<212> DNA

<213> Homo sapiens

<400> 5783

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ctggtgatcc agcagcgcgg ggtgcgaatc tacgatggcg aggagaagat aaaatttgat
120
gctgggactc tccttcttag tacacaccga ctgatttgga gagatcagaa aaatcatgag
180
tggtgcatgg ccattctcct ttcccaaatt gtgttcattg aagaacaggc ggctggaatt
240
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300
ccattccaga gtagtaagaa ctctacatc aaactctcct tcaaagaaca tggccagatt
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480
gtaggtattg aaaggaaact ggaagaaaaa agaaaagaaa ctgacaaaaa catttctgag
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720
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780
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900
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960
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1020
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1080
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1140

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 1200
 ccatatgctt gcgtcatgta gaggttgat gacattgagc taagagataa accccgatca
 1260
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 1320
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 1680
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 1740
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 1800
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 1839

<210> 5784

<211> 386

<212> PRT

<213> Homo sapiens

<400> 5784

Met Asp Arg Phe Val Trp Thr Ser Gly Leu Leu Glu Ile Asn Glu Thr
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 Leu Val Ile Gln Gln Arg Gly Val Arg Ile Tyr Asp Gly Glu Glu Lys
 20 25 30
 Ile Lys Phe Asp Ala Gly Thr Leu Leu Leu Ser Thr His Arg Leu Ile
 35 40 45
 Trp Arg Asp Gln Lys Asn His Glu Cys Cys Met Ala Ile Leu Leu Ser
 50 55 60
 Gln Ile Val Phe Ile Glu Glu Gln Ala Ala Gly Ile Gly Lys Ser Ala
 65 70 75 80
 Lys Ile Val Val His Leu His Pro Ala Pro Pro Asn Lys Glu Pro Gly
 85 90 95
 Pro Phe Gln Ser Ser Lys Asn Ser Tyr Ile Lys Leu Ser Phe Lys Glu
 100 105 110
 His Gly Gln Ile Glu Phe Tyr Arg Arg Leu Ser Glu Glu Met Thr Gln
 115 120 125
 Arg Arg Trp Glu Asn Met Pro Val Ser Gln Ser Leu Gln Thr Asn Arg
 130 135 140
 Gly Pro Gln Pro Gly Arg Ile Arg Ala Val Gly Ile Val Gly Ile Glu
 145 150 155 160
 Arg Lys Leu Glu Glu Lys Arg Lys Glu Thr Asp Lys Asn Ile Ser Glu
 165 170 175
 Ala Phe Glu Asp Leu Ser Lys Leu Met Ile Lys Ala Lys Glu Met Val

```

          180          185          190
Glu Leu Ser Lys Ser Ile Ala Asn Lys Ile Lys Asp Lys Gln Gly Asp
          195          200          205
Ile Thr Glu Asp Glu Thr Ile Arg Phe Lys Ser Tyr Leu Ser Met
          210          215          220
Gly Ile Ala Asn Pro Val Thr Arg Glu Thr Tyr Gly Ser Gly Thr Gln
          225          230          235
Tyr His Met Gln Leu Ala Lys Gln Leu Ala Gly Ile Leu Gln Val Pro
          245          250          255
Leu Glu Glu Arg Gly Gly Ile Met Ser Leu Thr Glu Val Tyr Cys Leu
          260          265          270
Val Asn Arg Ala Arg Gly Met Glu Leu Leu Ser Pro Glu Asp Leu Val
          275          280          285
Asn Ala Cys Lys Met Leu Glu Ala Leu Lys Leu Pro Leu Arg Leu Arg
          290          295          300
Val Phe Asp Ser Gly Val Met Val Ile Glu Leu Gln Ser His Lys Glu
          305          310          315
Glu Glu Met Val Ala Ser Ala Leu Glu Thr Val Ser Glu Lys Gly Ser
          325          330          335
Leu Thr Ser Glu Glu Phe Ala Lys Leu Val Gly Met Ser Val Leu Leu
          340          345          350
Ala Lys Glu Arg Leu Leu Leu Ala Glu Lys Met Gly His Leu Cys Arg
          355          360          365
Asp Asp Ser Val Glu Gly Leu Arg Phe Tyr Pro Asn Leu Phe Met Thr
          370          375          380
Gln Ser
385

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<210> 5785

<211> 785

<212> DNA

<213> Homo sapiens

<400> 5785

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120
ccttgccat gccagcttgg ttgggacagc cgggccaaagg gaaaaaaagg tgcaaaagtc
180
caaatgctgg cacttcaggt gtggccggca cccagccagg cgagtggggt gggcagggcg
240
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360
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420
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480
caaagcggac attctccttg tgggccagt tgtaggtctc ctgggtcccc tggagggatg
540
gggacttga ggggtccgc cggcgattca cagcattgaa cacaagcctt ggcctgcac
600

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tgcacagggg ccagggtccc agcggctgcy cgagagctgc gcccgctggg gctgcaaggt
 660
 cggcgccgcy ggctgccgcg ttttcaggag ctccctggagc tggcccttca cctgctgctg
 720
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 780
 cgcgc
 785

<210> 5786
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 5786
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 Arg Ser His Ala Ala Ala Gly Glu Gly Pro Ala Pro Gly Ala Pro Glu
 20 25 30
 Lys Pro Ala Ala Arg Ala Ala Asp Leu Ala Ala Pro Ala Gly Ala Ala
 35 40 45
 Leu Ala Gln Pro Leu Gly Pro Trp Pro Leu Ser Ser Ala Gly Pro Arg
 50 55 60
 Leu Val Phe Asn Arg Val Asn Arg Arg Arg Asp Pro Ser Lys Ser Pro
 65 70 75 80
 Ser Leu Gln Gly Thr Gln Glu Thr Tyr Thr Leu Ala His Lys Glu Asn
 85 90 95
 Val Arg Phe Val Ser Glu Ala Trp Gln Gln Val Gln Gln Gln Leu Asp
 100 105 110
 Gly Gly Pro Ala Gly Glu Gly Gly Pro Arg Pro Val Gln Tyr Val Glu
 115 120 125
 Arg Thr Pro Asn Pro Arg Leu Gln Asn Phe Val Pro Ile Asp Leu Asp
 130 135 140
 Glu Trp Trp Ala Gln Gln Phe Leu Ala Arg Ile Thr Ser Cys Ser
 145 150 155

<210> 5787
 <211> 1683
 <212> DNA
 <213> Homo sapiens

<400> 5787
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 120
 ccgnggcgag gaggattctg ggagttggag gccgaggctg cgacnccag gcgcaaacct
 180
 gccctggggg tgagggtgt aagtggcgcy attcgcggca gcgccccgat ggaacctcct
 240
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 300
 cagactagga tggctgtatc actaacagca gctgaaactc tggcccttca ggggtacacg
 360

ggacaagaga agatgatgat gatgggacca aaggaagagg aacagctcttg tgagtatgag
 420
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 480
 ctccgctacc aggagactcc tgggtcccccgg gaggccttga gccaaactacg agtactctgc
 540
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 600
 gaacaattct tgaccatcct gcctgaggag ctccaatcct ggggtgccccg acatcacctc
 660
 aagagtggag aggaggctgt gactgtgctg gaggatttag agaaaggact tgaaccagag
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 1020
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 1080
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 1140
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 1200
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 aacctcggtc agcatcagag aattcataca ggagagaaac ccttcgaatg taatgaatgt
 1320
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 1560
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 1683

<210> 5788

<211> 417

<212> PRT

<213> Homo sapiens

<400> 5788

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Glu Ile Phe Arg Gln Arg Phe Arg His Leu Arg Tyr Gln Glu Thr Pro			
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Leu Arg Pro Glu Lys His Thr Lys Glu Gln Ile Leu Glu Phe Leu Val			
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Leu Glu Gln Phe Leu Thr Ile Leu Pro Glu Glu Leu Gln Ser Trp Val			
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Arg Gly His His Pro Lys Ser Gly Glu Glu Ala Val Thr Val Leu Glu			
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His Gly Pro Ala Gln Glu Glu Pro Trp Glu Lys Lys Glu Ser Leu Gly			
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Ala Ala Gln Glu Ala Leu Ser Ile Gln Leu Gln Pro Lys Glu Thr Gln			
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Pro Phe Pro Lys Ser Glu Gln Val Tyr Leu His Phe Leu Ser Val Val			
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Thr Glu Asp Gly Pro Glu Pro Lys Asp Lys Gly Ser Leu Pro Gln Pro			
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Gln Arg Asn Pro Lys Ala Glu Arg Leu Arg Trp Ser Pro Ala Gln Glu			
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Glu Ser Phe Arg Gln Met Val Val Ile His Lys Glu Ile Pro Thr Gly			
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Lys Lys Asp His Glu Cys Ser Glu Cys Gly Lys Thr Phe Ile Tyr Asn			
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Ser His Leu Val Val His Gln Arg Val His Ser Gly Glu Lys Pro Tyr			
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Cys Gly Lys Ala Phe Arg Trp Gly Ala His Leu Val Gln His Gln Arg			
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<210> 5789

<211> 1201

<212> DNA

<213> Homo sapiens

<400> 5789

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<210> 5790

<211> 400

<212> PRT

<213> Homo sapiens

<400> 5790

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 Ala Lys Gly Thr Val Arg Gly Trp Asn Arg Arg Ala Arg Glu Ser Pro
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 Val Glu Asp Asn His Ser Tyr Tyr Val Ser Arg Leu Tyr Gly Pro Ser
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 Glu Pro His Ser Arg Glu Leu Trp Val Asp Val Ala Glu Ala Asn Arg
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 225 230 235 240
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 Gly Arg Ile Val Phe Ala Tyr Lys Glu Ile Pro Met Ser Val Pro Glu
 260 265 270
 Ile Ser Ser Ser Gln His Pro Val Lys Thr Gly Leu Ser Asp Ala Phe
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 Cys His Val Leu Gln Arg Cys Ser Ser Gly Phe Asp Arg Tyr Arg Gln
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<210> 5791

<211> 3285

<212> DNA

<213> Homo sapiens

<400> 5791

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<210> 5792

<211> 479

<212> PRT

<213> Homo sapiens

<400> 5792

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 195 200 205
 Thr Ser Leu Lys Tyr Ser Phe Gln Thr Lys Asp Arg Leu Cys Phe Val
 210 215 220
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 245 250 255
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Arg His Ser Phe Phe Ser Gly Val Asn Trp Gln Asp Val Tyr Asp Lys
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<211> 2767

<212> DNA

<213> Homo sapiens

<400> 5793

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<210> 5794

<211> 209

<212> PRT

<213> Homo sapiens

<400> 5794

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<210> 5795

<211> 993

<212> DNA

<213> Homo sapiens

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<210> 5796

<211> 200

<212> PRT

<213> Homo sapiens

<400> 5796

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Gln Thr Gln Met Lys Leu Met Ala Ile Pro Leu Val Phe Gln Ile Met
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<211> 405

<212> DNA

<213> Homo sapiens

<400> 5797

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<210> 5798

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<212> PRT

<213> Homo sapiens

<400> 5798

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Arg Arg Val Glu Gly Ser Arg Asp Gln Ala Trp Pro Leu Gln Thr Phe
          35          40          45
Ser Gln Arg Asn Tyr Arg Ser Leu Ser Leu Tyr Cys Trp Leu Ala Arg
          50          55          60
Glu Gly Arg Thr Ser Ser Tyr Gln Gly Asn Gln Gly Ser Leu Arg Pro
65          70          75          80
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<210> 5799

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<210> 5800

<211> 535

<212> PRT

<213> Homo sapiens

<400> 5800

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Glu Leu Leu Thr Leu Val Ser Gln Lys Met Cys Val Val Val Tyr Pro				
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Glu Val Glu Arg Gly Ser Gly Thr Glu Glu Ala Asn Glu Asp Met Glu				
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<211> 2418

<212> DNA

<213> Homo sapiens

<400> 5801

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<211> 350

<212> PRT

<213> Homo sapiens

<400> 5802

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Gly Leu Gly Glu Leu Phe Leu Asp Gly Leu Ser Thr Glu Asn Pro His			
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	260	265	270
Leu Phe Leu Tyr Pro Glu Tyr Ala Gln Ser Asp Phe Ile Ser Ala Phe			
	275	280	285
His Glu Asp Ser Arg Phe Ile Asp His Leu Met Val Met Phe Gly Glu			
	290	295	300
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<211> 692

<212> DNA

<213> Homo sapiens

<400> 5803

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<211> 126

<212> PRT

<213> Homo sapiens

<400> 5804

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		50				55					60				
Lys	Ile	Ile	His	Gln	Ala	His	Lys	Ser	Lys	Thr	Asn	Glu	Leu	Val	Leu
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Ser	Leu	Glu	Asp	Asp	Glu	Arg	Leu	Leu	Leu	Lys	Glu	Asp	Ser	Thr	Leu
			85						90				95		
Lys	Ala	Ala	Gly	Ile	Ala	Ser	Glu	Thr	Glu	Ile	Ala	Phe	Phe	Cys	Glu
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Glu	Asp	Tyr	Arg	Asn	Tyr	Lys	Ala	Asn	Pro	Ile	Ser	Ser	Trp		
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<210> 5805

<211> 1112

<212> DNA

<213> Homo sapiens

<400> 5805

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<210> 5806

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5806

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35 40 45
Ser Asp Phe Asp Arg Cys Cys Lys Leu Lys Asp Arg Leu Pro Ser Ile
50 55 60
Val Val Glu Pro Thr Glu Gly Glu Val Glu Ser Gly Glu Leu Arg Trp
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<210> 5807
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<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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35      40      45
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50      55      60
Asp Leu Gly Leu Leu Leu Phe Val Gly Gln His Ser Leu Met Ala
65      70      75      80
Ala Glu Arg Val Lys Ala Trp Thr Ser Arg Tyr Phe Gly Val Leu Gln
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Val Ile Ser Trp Leu Leu Ile Phe Ser Ile Leu Leu Val Phe Asp Tyr
145     150     155     160
Ala Glu Leu Met Gly Leu Lys Gln Val Tyr Tyr His Val Leu Gly Leu
165     170     175
Gly Glu Pro Leu Ala Leu Lys Ser Pro Arg Ala Leu Arg Leu Phe Ser
180     185     190
His Leu Arg His Pro Val Cys Val Glu Leu Leu Thr Val Leu Trp Val
195     200     205
Val Pro Thr Leu Gly Thr Asp Arg Leu Leu Leu Ala Phe Leu Leu Thr
210     215     220
Leu Tyr Leu Gly Leu Ala His Gly Leu Asp Gln Gln Asp Leu Arg Tyr
225     230     235     240
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<210> 5809

<211> 2009

<212> DNA

<213> Homo sapiens

<400> 5809

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 2009

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 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 5810
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 Phe Lys Gln Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp His Tyr Lys
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 His Pro Thr Pro
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 <212> DNA
 <213> Homo sapiens

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<210> 5812

<211> 463

<212> PRT

<213> Homo sapiens

<400> 5812

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 50 55 60
 Thr Leu Gln Glu Leu Leu Ala Arg Asp Thr Val Gln Val Glu Leu Ile
 65 70 75 80
 Pro Glu Lys Lys Gly Leu Phe Leu Lys His Val Glu Tyr Glu Val Ser
 85 90 95
 Ser Gln Arg Phe Lys Ser Ser Val Tyr Arg Arg Tyr Asn Asp Phe Val
 100 105 110
 Val Phe Gln Glu Met Leu Leu His Lys Phe Pro Tyr Arg Met Val Pro


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Ala Leu Pro Pro Lys Arg Met Leu Gly Ala Asp Arg Glu Phe Ile Glu
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Ala Arg Arg Arg Ala Leu Lys Arg Phe Val Asn Leu Val Ala Arg His
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Pro Leu Phe Ser Glu Asp Val Val Leu Lys Leu Phe Leu Ser Phe Ser
165              170              175
Gly Ser Asp Val Gln Asn Lys Leu Lys Glu Ser Ala Gln Cys Val Gly
180              185              190
Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu
195              200              205
Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile Ser Arg Glu Leu Ile Arg
210              215              220
Asn Ile Tyr Asn Ser Phe His Lys Leu Arg Asp Arg Ala Glu Arg Ile
225              230              235              240
Ala Ser Arg Ala Ile Asp Asn Ala Ala Asp Leu Leu Ile Phe Gly Lys
245              250              255
Glu Leu Ser Ala Ile Gly Ser Asp Thr Thr Pro Leu Pro Ser Trp Ala
260              265              270
Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly
275              280              285
Leu Ser Val Glu Phe Ala Leu Leu Ala Asp Lys Ala Ala Gln Gln Gly
290              295              300
Lys Gln Glu Glu Asn Asp Val Val Glu Lys Leu Asn Leu Phe Leu Asp
305              310              315              320
Leu Leu Gln Ser Tyr Lys Asp Leu Cys Glu Arg His Glu Lys Gly Val
325              330              335
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Gln Met Met Ser Ala Thr Ala Gln Asn Arg Glu Pro Glu Ser Val Glu
355              360              365
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Glu Leu Arg Asn Tyr Phe Ser Leu Tyr Cys Leu His Gln Glu Thr Gln
385              390              395              400
Leu Ile His Val Tyr Leu Pro Leu Thr Ser His Ile Leu Arg Ala Phe
405              410              415
Val Asn Ser Gln Ile Gln Gly His Lys Glu Met Ser Lys Val Trp Asn
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<210> 5813

<211> 2991

<212> DNA

<213> Homo sapiens

<400> 5813

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120

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<211> 149

<212> PRT

<213> Homo sapiens

<400> 5814

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 Arg Leu Phe Asn Leu Val His Gln Ala Tyr Glu Val Leu Ser Asp Pro

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Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg
      65              70              75              80
Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Arg Arg Leu Gln
      85              90              95
Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
      100             105             110
Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu
      115             120             125
Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro
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Val Ser His Glu His
145

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<210> 5815

<211> 590

<212> DNA

<213> Homo sapiens

<400> 5815

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<210> 5816

<211> 196

<212> PRT

<213> Homo sapiens

<400> 5816

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Ala Ala Asp Glu Val Leu Ala Val Leu Lys Asn Glu Lys Leu Arg Asp
20           25           30
Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Gly Gln Thr Asp Asp

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35					40					45						
Thr	Arg	Tyr	His	Val	Leu	Val	Asn	Leu	Gly	Leu	Pro	Ser	Leu	Phe	Ser	
50					55					60						
Phe	Gly	Leu	Val	Asp	Asp	Ala	His	His	Leu	Ile	Asn	Ala	Leu	Arg	Gln	
65						70						75				
Gln	Ser	Ile	Thr	Leu	His	Leu	Val	Asp	Val	Met	Pro	Val	Leu	Ile	Thr	
85					90					95						
Leu	Ser	Ser	Leu	Gly	Ser	Phe	Leu	Leu	His	Leu	Arg	Phe	Gly	Pro		
100					105					110						
Leu	Ser	Leu	Val	Ser	His	Thr	Gly	Ala	Leu	Gln	Leu	Pro	Asn	Lys	Gly	
115					120					125						
Gln	His	Leu	Ser	Cys	Gly	Phe	Ile	Pro	Ala	Gly	Pro	Val	Asn	Glu	Arg	
130					135					140						
Thr	Val	Ser	Leu	Glu	His	Lys	Ile	Arg	Val	Arg	Leu	Val	Leu	Val	Leu	
145						150						155				
Gln	Thr	Thr	Gly	Gly	Tyr	Ile	Arg	His	Gly	Arg	Gly	Cys	Ser	Glu	Ala	
165					170					175						
Ser	Asp	His	His	Ala	Ser	Ile	Pro	Gln	Ala	Ala	Asn	Gly	Arg	Arg	Ser	
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<210> 5817
<211> 648
<212> DNA
<213> Homo sapiens
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400> 5817					
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<210> 5818
<211> 191
<212> PRT
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<213> Homo sapiens

<400> 5818

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              20              25              30
Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
 35              40              45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
 50              55              60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
 65              70              75              80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
 85              90              95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
100              105              110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
115              120              125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
130              135              140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
145              150              155              160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
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Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
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<210> 5819

<211> 1652

<212> DNA

<213> Homo sapiens

<400> 5819

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600

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<210> 5820

<211> 274

<212> PRT

<213> Homo sapiens

<400> 5820

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 Pro Lys Asn Asp Ala Asp Asp Glu Ser Glu Thr Pro Glu Glu Leu Glu
 35 40 45
 Glu Glu Ile Pro Val Val Ile Cys Ala Ala Ala Gly Arg Met Gly Ala
 50 55 60
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[illegible]

<210> 5821

<211> 3292

<212> DNA

<213> Homo sapiens

<400> 5821

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120	taaaaaggaa	aaaatataac	ttagagcccc	ctatgaaaaa	ctaaattagc
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600	gaagaccctc	ggagccaggg	cgtggaagaa	ttcatacagg	agtcaaaatt
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<210> 5822

<211> 712

<212> PRT

<213> Homo sapiens

<400> 5822

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 His Lys Glu Arg Cys Ile Ala Ala Ser Leu Glu Leu Asn Asn Pro Val
 35 40 45
 Pro Glu Gln Pro Pro Leu Pro Thr Ser Glu Ser Pro Phe Ala Trp Ser
 50 55 60
 Pro Leu Ala Gly Glu Lys Phe Val Glu Val Tyr Lys Glu Ala His Leu
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 Leu Ala Leu His Ile Glu Ser Ser Ser Arg Asn Gln Ala Ala Gln Ala
 85 90 95
 Ala Lys Pro Glu Asp Pro Arg Ser Gln Gly Val Glu Arg Phe Ile Gln

100
 Glu Ser Lys Leu Lys Ile Asn Leu Phe Glu Lys Glu Lys Glu Met Lys
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 Lys Ser Pro Thr Ser Leu Lys Arg Glu Thr Tyr Tyr Leu Ser Asp Ser
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 Pro Leu Leu Gly Pro Pro Val Gly Glu Pro Arg Leu Leu Ala Ser Ser
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 Pro Ala Leu Pro Ser Ser Gly Ala Gln Ala Arg Leu Thr Arg Ala Pro
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 Gly Pro Pro His Ser Ala His Ala Leu Pro Arg Glu Ser Cys Thr Ala
 180
 His Ala Ala Ser Gln Ala Ala Thr Gln Arg Lys Pro Gly Thr Lys Leu
 195
 Leu Leu Pro Arg Ala Ala Ser Val Arg Gly Arg Ser Ile Pro Gly Ala
 210
 Ala Glu Lys Pro Lys Lys Glu Ile Pro Ala Ser Pro Ser Arg Thr Lys
 225
 Ile Pro Ala Glu Lys Glu Ser His Arg Asp Val Leu Pro Asp Lys Pro
 245
 Ala Pro Gly Ala Val Asn Val Pro Ala Ala Gly Ser His Leu Gly Gln
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 Gly Lys Arg Ala Ile Pro Val Pro Asn Lys Leu Gly Leu Lys Lys Thr
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 325
 Ser Arg Pro Leu Ser Asn Ile Ser Lys Ser Gly Arg Met Gly Pro Ala
 340
 Met Leu Arg Pro Ala Leu Pro Ala Gly Pro Val Gly Ala Ser Ser Trp
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 370
 Ala Pro Pro Ser Ala Ser Pro Thr Gln Pro Gln Thr Pro Glu Gly Gly
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 Asn Lys Thr Arg Ser Ile Arg Arg Asp Ser Cys Leu Asn Ser Lys
 420
 Thr Lys Val Met Pro Thr Pro Thr Asn Gln Phe Lys Ile Pro Lys Phe
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 450
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 465
 Thr Pro Val Arg Arg Ser Ser Gly Pro Ala Pro Gln Ser Leu Leu Ser
 485
 Ala Trp Arg Val Ser Ala Leu Pro Thr Pro Ala Ser Arg Cys Ser
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 Gly Leu Pro Pro Met Thr Pro Lys Thr Met Pro Arg Ala Val Gly Ser
 515
 Pro Leu Cys Val Pro Ala Arg Arg Ser Ser Glu Pro Arg Lys Asn
 520
 525

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Ser Ala Met Arg Thr	Glu Pro Thr Arg	Glu Ser Asn Arg	Lys Thr Asp	
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	580	585	590	
Ser Lys Ser Thr Ala	Thr Glu Val Ala	Arg Glu Glu Lys	Pro Gly	
	595	600	605	
Gly Asp Ala Ala Pro	Ser Glu Ala Leu	Leu Val Asp Ile	Lys Leu Glu	
	610	615	620	
Pro Leu Ala Val Thr	Pro Asp Ala Ala	Ser Gln Pro Leu	Ile Asp Leu	
625	630	635	640	
Pro Leu Ile Asp Phe	Cys Asp Thr Pro	Glu Ala His Val	Ala Val Gly	
	645	650	655	
Ser Glu Ser Arg Pro	Leu Ile Asp Leu	Met Thr Asn Thr	Pro Asp Met	
	660	665	670	
Asn Lys Asn Val Ala	Lys Pro Ser Pro	Val Val Gly Gln	Leu Ile Asp	
	675	680	685	
Leu Ser Ser Pro Leu	Ile Gln Leu Ser	Pro Glu Ala Asp	Lys Glu Asn	
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<210> 5823

<211> 2585

<212> DNA

<213> Homo sapiens

<400> 5823

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720

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<212> PRT

<213> Homo sapiens

<400> 5830

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Trp	Ala	Pro	Gly	Lys	Pro	Arg	Pro	Val	Gly	Lys	Asp	Lys	Lys	Cys	Val					
		915					920					925								
Tyr	Met	Thr	Ala	Ser	Arg	Glu	Asp	Trp	Gly	Asp	Gln	Arg	Cys	Leu	Thr					
	930					935					940									
Ala	Leu	Pro	Tyr	Ile	Cys	Lys	Arg	Ser	Asn	Val	Thr	Lys	Glu	Thr	Gln					
	945				950				955						960					
Pro	Pro	Asp	Leu	Pro	Thr	Thr	Ala	Leu	Gly	Gly	Cys	Pro	Ser	Asp	Trp					
				965					970					975						
Ile	Gln	Phe	Leu	Asn	Lys	Cys	Phe	Gln	Val	Gln	Gly	Gln	Glu	Pro	Gln					
		980					985					990								
Ser	Arg	Val	Lys	Trp	Ser	Glu	Ala	Gln	Phe	Ser	Cys	Glu	Gln	Gln	Glu					
		995				1000					1005									
Ala	Gln	Leu	Val	Thr	Ile	Thr	Asn	Pro	Leu	Glu	Gln	Ala	Phe	Ile	Thr					
	1010				1015					1020										
Ala	Ser	Leu	Pro	Asn	Val	Thr	Phe	Asp	Leu	Trp	Ile	Gly	Leu	His	Ala					
	1025				1030				1035					1040						
Ser	Gln	Arg	Asp	Phe	Gln	Trp	Val	Glu	Gln	Glu	Pro	Leu	Met	Tyr	Ala					
			1045					1050					1055							
Asn	Trp	Ala	Pro	Gly	Glu	Pro	Ser	Gly	Pro	Ser	Pro	Ala	Pro	Ser	Gly					
		1060						1065				1070								
Asn	Lys	Pro	Thr	Ser	Cys	Ala	Val	Val	Leu	His	Ser	Pro	Ser	Ala	His					
		1075				1080					1085									
Phe	Thr	Gly	Arg	Trp	Asp	Asp	Arg	Ser	Cys	Thr	Glu	Glu	Thr	His	Gly					
	1090				1095					1100										
Phe	Ile	Cys	Gln	Lys	Gly	Thr	Asp	Pro	Ser	Leu	Ser	Pro	Ser	Pro	Ala					
	1105				1110					1115					1120					
Al																				

1220 1225 1230
 Ser Cys Asp Thr Lys Leu Gln Gly Ala Val Cys Gly Val Ser Ser Gly
 1235 1240 1245
 Pro Pro Pro Pro Arg Arg Ile Ser Tyr His Gly Ser Cys Pro Gln Gly
 1250 1255 1260
 Leu Ala Asp Ser Ala Trp Ile Pro Phe Arg Glu His Cys Tyr Ser Phe
 1265 1270 1275 1280
 His Met Glu Leu Leu Leu Gly His Lys Glu Ala Arg Gln Arg Cys Gln
 1285 1290 1295
 Arg Ala Gly Gly Ala Val Leu Ser Ile Leu Asp Glu Met Glu Asn Val
 1300 1305 1310
 Phe Val Trp Glu His Leu Gln Ser Tyr Glu Gly Gln Ser Arg Gly Ala
 1315 1320 1325
 Trp Leu Gly Met Asn Phe Asn Pro Lys Gly Gly Thr Leu Val Trp Gln
 1330 1335 1340
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 1345 1350 1355 1360
 Pro Ser Met Leu Ser His Asn Ser Cys Tyr Trp Ile Gln Ser Asn Ser
 1365 1370 1375
 Gly Leu Trp Arg Pro Gly Ala Cys Thr Asn Ile Thr Met Gly Val Val
 1380 1385 1390
 Cys Lys Leu Pro Arg Ala Glu Gln Ser Ser Phe Ser Pro Ser Ala Leu
 1395 1400 1405
 Pro Glu Asn Pro Ala Ala Leu Val Val Val Leu Met Ala Val Leu Leu
 1410 1415 1420
 Leu Leu Ala Leu Leu Thr Ala Ala Leu Ile Leu Tyr Arg Arg Arg Gln
 1425 1430 1435 1440
 Ser Ile Glu Arg Gly Ala Phe Glu Gly Ala Arg Tyr Ser Arg Ser Ser
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 Glu Met Asn Glu Gln Gln Glu
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<210> 5831

<211> 2216

<212> DNA

<213> Homo sapiens

<400> 5831

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120

actcttaagt tctcagcact atgttatgca cttgacgggc attactttaa tcctccactg

180

tgagatactt gttattgcct cattttgtag acgagaaaaac gggcatagag ggtgagacat

240

tggcccagggt tcattccgta aggggtggag cctggaattc agatacagga ggaagttaac

300

atccctaata ggagggttct ggttactgggt gccactgggc ttcttggcag agctgtacac

360

aaagaatttc agcagaataa ttggcatgca gttggctgtg gtttcagaag agcaagacca

420

aaatttgaac aggttaatat gttggattct aatgcagttc atcacatcat tcatgatttt
480
cagcccatcg ttatagtaca ttgtgcagca gagagaagac cagatgttgt agaaaatcag
540
ccagatgctg cctctcaact taatgtggat gcttctggga atttagcaaa ggaagcagct
600
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660
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720
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780
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900
gatgtggcca ctgtgtgccg gcagctagca gagaagagaa tgctggatcc atcaattaag
960
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1200
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1260
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1380
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1680
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1740
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1860
caaacgtgta tttttttaat ataaatatat aactgtcctt ttcateccat gttgcgccta
1920
agtgatattt catatgtgtg gttatactca taataatggg ccttgtaagt cttttcacca
1980
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2040

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 2100
 tttaaaaatt acattcttct gatgtaacat gtgatacata caaaagaata tagttaaata
 2160
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<210> 5832

<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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Arg	Arg	Val	Leu	Val	Thr	Gly	Ala	Thr	Gly	Leu	Leu	Gly	Arg	Ala	Val	
			20					25					30			
His	Lys	Glu	Phe	Gln	Gln	Asn	Asn	Trp	His	Ala	Val	Gly	Cys	Gly	Phe	
		35				40						45				
Arg	Arg	Ala	Arg	Pro	Lys	Phe	Glu	Gln	Val	Asn	Leu	Leu	Asp	Ser	Asn	
		50				55				60						
Ala	Val	His	His	Ile	Ile	His	Asp	Phe	Gln	Pro	His	Val	Ile	Val	His	
65				70					75					80		
Cys	Ala	Ala	Glu	Arg	Arg	Pro	Asp	Val	Val	Glu	Asn	Gln	Pro	Asp	Ala	
				85				90						95		
Ala	Ser	Gln	Leu	Asn	Val	Asp	Ala	Ser	Gly	Asn	Leu	Ala	Lys	Glu	Ala	
			100					105					110			
Ala	Ala	Val	Gly	Ala	Phe	Leu	Ile	Tyr	Ile	Ser	Ser	Asp	Tyr	Val	Phe	
			115				120					125				
Asp	Gly	Thr	Asn	Pro	Pro	Tyr	Arg	Glu	Glu	Asp	Ile	Pro	Ala	Pro	Leu	
		130				135					140					
Asn	Leu	Tyr	Gly	Lys	Thr	Lys	Leu	Asp	Gly	Glu	Lys	Ala	Val	Leu	Glu	
145				150					155					160		
Asn	Asn	Leu	Gly	Ala	Ala	Val	Leu	Arg	Ile	Pro	Ile	Leu	Tyr	Gly	Glu	
			165					170						175		
Val	Glu	Lys	Leu	Glu	Glu	Ser	Ala	Val	Thr	Val	Met	Phe	Asp	Lys	Val	
			180					185					190			
Gln	Phe	Ser	Asn	Lys	Ser	Ala	Asn	Met	Asp	His	Trp	Gln	Gln	Arg	Phe	
			195				200					205				
Pro	Thr	His	Val	Lys	Asp	Val	Ala	Thr	Val	Cys	Arg	Gln	Leu	Ala	Glu	
			210				215				220					
Lys	Arg	Met	Leu	Asp	Pro	Ser	Ile	Lys	Gly	Thr	Phe	His	Trp	Ser	Gly	
225				230					235					240		
Asn	Glu	Gln	Met	Thr	Lys	Tyr	Glu	Met	Ala	Cys	Ala	Ile	Ala	Asp	Ala	
			245						250					255		
Phe	Asn	Leu	Pro	Ser	Ser	His	Leu	Arg	Pro	Ile	Thr	Asp	Ser	Pro	Val	
			260					265					270			
Leu	Gly	Ala	Gln	Arg	Pro	Arg	Asn	Ala	Gln	Leu	Asp	Cys	Ser	Lys	Leu	
			275				280					285				
Glu	Thr	Leu	Gly	Ile	Gly	Gln	Arg	Thr	Pro	Phe	Arg	Ile	Gly	Ile	Lys	
			290			295					300					
Glu	Ser	Leu	Trp	Pro	Phe	Leu	Ile	Asp	Lys	Arg	Trp	Arg	Gln	Thr	Val	
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305																
Phe	His															

<210> 5833

<211> 805

<212> DNA

<213> Homo sapiens

<400> 5833

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120
cctaaacctg tgctccagga agaaaacaac caagagtctt ttattgcatt tgctcgggtg
180
ttcagtggtg tggctcgaag aggaaagaaa atttttgtct tggggcccaa atacagtcct
240
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300
gtccccaca tggcatactg tgctctggaa aacctgtatc ttctgatggg aagggaactg
360
gaatatctag aggaggtacc tccaggaaat gtgctaggaa taggaggcct tcaagatttt
420
gtgctgaaat ctgcaacact gtgtagcctg ccatcctgcc caccatttat accactcaac
480
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540
cagctcgtaa aaggaatgaa actgttaaac caggctgac cctgtgtcca gattttaatt
600
caggaacagg gagagcacgt tttagtaca gcaggagaag tccacctta cggatgcctg
660
gatgacttaa aagaaagggt tgcaaagatt catatcagtg tatctgaacc tattattcca
720
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780
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<210> 5834

<211> 268

<212> PRT

<213> Homo sapiens

<400> 5834

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Lys Leu Ala Ala Gln Gly Gln Ala Pro Leu Glu Pro Thr Gln Asp
1           5           10           15
Gly Ser Ala Ile Glu Thr Cys Pro Lys Gly Asp Glu Pro Arg Gly Asp
20           25           30
Glu Gln Gln Val Glu Ser Met Thr Pro Lys Pro Val Leu Gln Glu Glu
35           40           45
Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val
50           55           60
Ala Arg Arg Gly Lys Lys Ile Phe Val Leu Gly Pro Lys Tyr Ser Pro
65           70           75           80
Leu Glu Phe Leu Arg Arg Val Pro Leu Gly Phe Ser Ala Pro Pro Asp

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	85		90		95
Gly Leu Pro Gln Val Pro His Met Ala Tyr Cys Ala Leu Glu Asn Leu					
	100		105		110
Tyr Leu Leu Met Gly Arg Glu Leu Glu Tyr Leu Glu Glu Val Pro Pro					
	115		120		125
Gly Asn Val Leu Gly Ile Gly Gly Leu Gln Asp Phe Val Leu Lys Ser					
	130		135		140
Ala Thr Leu Cys Ser Leu Pro Ser Cys Pro Pro Phe Ile Pro Leu Asn					
	145		150		155
Phe Glu Ala Thr Pro Ile Val Arg Val Ala Val Glu Pro Lys His Pro					
	165		170		175
Ser Glu Met Pro Gln Leu Val Lys Gly Met Lys Leu Leu Asn Gln Ala					
	180		185		190
Asp Pro Cys Val Gln Ile Leu Ile Gln Glu Thr Gly Glu His Val Leu					
	195		200		205
Val Thr Ala Gly Glu Val His Leu Gln Arg Cys Leu Asp Asp Leu Lys					
	210		215		220
Glu Arg Phe Ala Lys Ile His Ile Ser Val Ser Glu Pro Ile Ile Pro					
	225		230		235
Phe Arg Glu Thr Ile Thr Lys Pro Pro Lys Val Asp Met Val Asn Glu					
	245		250		255
Glu Ile Gly Lys Gln Gln Lys Val Ala Val Ile His					
	260		265		

<210> 5835

<211> 420

<212> DNA

<213> Homo sapiens

<400> 5835

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120
gcactgcata agcaagtctt tatgggccca tataatccag acacttgtcc tgaggttgga
180
ttctttgatg tgttggggaa tgacaggagg agagaatggg cagccctggg aaacatgtct
240
aaagaggatg ccatggtgga gtttgtcaag ctcttaataa ggtgttgcca tctcttttca
300
acatatgttg cgtccacaaa aatagagaag gaagagcaag acaaaaaaag gaaggaggaa
360
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420

<210> 5836

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5836

Xaa Leu Glu Gln Arg Trp Gly Phe Gly Leu Glu Glu Leu Tyr Gly Leu
1 5 10 15
Ala Leu Arg Phe Phe Lys Glu Lys Asp Gly Lys Ala Phe His Pro Thr

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                20                25                30
Tyr Glu Glu Lys Leu Lys Leu Val Ala Leu His Lys Gln Val Leu Met
      35                40                45
Gly Pro Tyr Asn Pro Asp Thr Cys Pro Glu Val Gly Phe Phe Asp Val
      50                55                60
Leu Gly Asn Asp Arg Arg Glu Trp Ala Ala Leu Gly Asn Met Ser
65      70                75                80
Lys Glu Asp Ala Met Val Glu Phe Val Lys Leu Leu Asn Arg Cys Cys
      85                90                95
His Leu Phe Ser Thr Tyr Val Ala Ser His Lys Ile Glu Lys Glu Glu
      100               105               110
Gln Asp Lys Lys Arg Lys Glu Glu Glu Glu Arg Arg Arg Glu Glu
      115               120               125
Glu Glu Arg Glu Arg Leu Gln Lys Glu Glu Glu Lys
      130               135               140

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<210> 5837

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5837

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120
tggggccaagg gggacatcca gggggcaggg gccgcctccc gcogtgccct cctgctgggg
180
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240
taccttgccct ccgagacccc gccctagttg cccctacagc cctcactgtg aaccttgagg
300
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360
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420
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480
cgaggaaggg gctgcagttc tccaaggatt ccgcctgctg ccagatcccc cgggagtcgt
540
aggaaccctg tcctggacgc tgacgtcggc ttccagggat cc
582

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<210> 5838

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5838

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Xaa Arg Leu Ser Pro Phe Leu Pro His Asp His Leu Gly Leu Ala Val
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Phe Ser Met Leu Cys Cys Phe Trp Pro Val Gly Ile Ala Ala Phe Cys
      20      25      30
Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

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	35		40		45	
Ala	Gly	Ala	Ala	Ser	Arg	Arg
	50		55		60	
Gly	Leu	Gly	Val	Cys	Thr	Tyr
	65		70		75	
Tyr	Leu	Ala	Ser	Arg	Asp	Pro
			85			

<210> 5839

<211> 1895

<212> DNA

<213> Homo sapiens

<400> 5839

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120
cattcgaatg catccaacc agtgctcagc tgcgtaacga catggagaga ggcagggggg
180
aatagaaagc aaatttaaaa acaccaacac ccaaacacac aagactgcac acaagaaaaa
240
gtgctcaaga aactttggct ttgaaggga ttcagtgaag ggaagcgatt gtgcaggagg
300
aagggaagaa acccagcatc accctaaggg gcggggggct ggagggcgag gccctgagac
360
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660
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1080
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1140
cgtttcccta aagaatcacc cagatcttaa ctgccctctc caccttcttt tttttccccc
1200

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tcctatttta cattctattt tctcatatcc agctttttctc tctaagccta accaaaatgct
 1260
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 1320
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 1380
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 1440
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 1740
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 1860
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 1895

<210> 5840

<211> 138

<212> PRT

<213> Homo sapiens

<400> 5840

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 Leu Met Val His Gly Trp Cys Pro Val Ile Phe Ser Trp Ala Val Ala
 35 40 45
 Pro Arg Gly Ser Gly Phe Pro Ala Gln Gly Ile Phe Asp Pro Cys Gln
 50 55 60
 Arg Arg Glu Arg Glu Leu Ser Trp Phe Pro Phe His Leu Phe Ser Gly
 65 70 75 80
 Cys Phe Lys Ala Asn Ile Pro Val Pro Asn Val Leu Cys Gly Leu Asn
 85 90 95
 Pro Gly Arg Gly Gln Gly His Ile Gln Val Gly Leu Ala Ser Ser Thr
 100 105 110
 Thr Phe Trp Pro Gln Gln Arg Met Gly Phe His Gln Ser Leu Ser Thr
 115 120 125
 Ser Arg Phe Pro Lys Glu Ser Pro Arg Ser
 130 135

<210> 5841

<211> 3411

<212> DNA

<213> Homo sapiens

<400> 5841
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120
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180
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240
caaagtgatg ctgctctgca ggtggacatt tctgatgctc ttagtgagcg ggataaagta
300
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360
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420
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480
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660
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720
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 Val Leu Leu Ser Glu Arg Ala His Gly Ile Ser Ser Gln Gly Asn Gly
 645 650 655
 Gln Val Glu Val Met Leu His Arg Arg Leu Trp Asn Asn Phe Asp Trp
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 Asp Leu Gly Tyr Asn Leu Thr Leu Asn Asp Thr Ser Val Val His Pro
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 690 695 700
 Gln Arg Ser Ala Leu Ala Leu Gln His Arg Pro Val Val Leu Phe Gly
 705 710 715 720
 Asp Leu Ala Gly Thr Ala Pro Lys Leu Pro Gly Pro Gln Gln Gln Glu
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 Ala Val Thr Leu Pro Pro Asn Leu His Leu Gln Ile Leu Ser Ile Pro
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 Gly Trp Arg Tyr Ser Ser Asn His Thr Glu His Ser Gln Asn Leu Arg
 755 760 765
 Lys Gly His Arg Gly Glu Ala Gln Ala Asp Leu Arg Arg Val Leu Leu
 770 775 780
 Arg Leu Tyr His Leu Tyr Glu Val Gly Glu Asp Pro Val Leu Ser Gln
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<210> 5845

<211> 2762

<212> DNA

<213> Homo sapiens

<400> 5845

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<210> 5846

<211> 257

<212> PRT

<213> Homo sapiens

<400> 5846

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			20					25					30		
Gln	Gln	Glu	Lys	Glu	Trp	Leu	Leu	Ala	Glu	Glu	Thr	Ala	Ala	Thr	Ala
			35				40					45			
Ser	Ala	Ile	Glu	Ala	Met	Lys	Lys	Ala	Tyr	Gln	Glu	Glu	Leu	Ser	Arg
			50			55					60				
Glu	Leu	Ser	Lys	Thr	Arg	Ser	Leu	Gln	Gln	Gly	Pro	Asp	Gly	Leu	Arg
65				70					75				80		
Lys	Gln	His	Gln	Ser	Asp	Val	Glu	Ala	Leu	Lys	Arg	Glu	Leu	Gln	Val
			85					90					95		
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			130			135					140				
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			165				170						175		
Leu	Leu	Arg	Val	Lys	Glu	Asn	Glu	Leu	Gln	Tyr	Leu	Lys	Lys	Glu	Val
			180				185						190		
Gln	Cys	Leu	Arg	Asp	Glu	Leu	Gln	Met	Met	Gln	Lys	Asp	Lys	Arg	Phe
			195				200				205				
Thr	Ser	Gly	Lys	Tyr	Gln	Asp	Val	Tyr	Val	Glu	Leu	Ser	His	Ile	Lys

210		215		220
Thr Arg Ser Glu Arg	Glu Ile Glu Gln Leu Lys	Glu His Leu Arg Leu		
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<210> 5847

<211> 1021

<212> DNA

<213> Homo sapiens

<400> 5847

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120
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180
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<210> 5848

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5848

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Leu Ser Arg His Thr Val Lys Pro Arg Ala Leu Ser Thr Phe Leu Phe
      35              40              45
Gly Ser Ile Arg Gly Ala Ala Pro Val Ala Val Glu Pro Gly Ala Ala
      50              55              60
Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
      65              70              75              80
Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Arg Cys Lys Asp Cys
      85              90              95
Tyr Leu Val Lys Arg Arg Gly Arg Trp Tyr Val Tyr Cys Lys Thr His
      100             105             110
Pro Arg His Lys Gln Arg Gln Met
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<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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 720
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 840

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<210> 5850

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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His	Ser	Val	Pro	Ala	Tyr	Pro	Trp	Asp	Trp	Gly	His	Leu	Ile	Arg	Phe
			20					25				30			
Cys	Thr	Gln	Thr	Gly	His	Ala	Gln	Pro	Cys	Pro	Ser	Ala	Pro	Ser	Thr
			35				40					45			
Gly	Pro	Ile	His	Ile	Ala	Glu	Gly	Gly	Arg	Gly	Arg	Pro	Pro	Pro	Gly
			50				55				60				
Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
65			70					75				80			
Gly	Leu	Ser	Pro	Val	Pro	Gly	Val	Gly	Gly	Arg	Gln	Cys	Pro	Gly	Thr
			85					90				95			
Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
			100					105				110			
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
			115				120					125			
Asn	Met	Ser	Arg	Ser	Glu	Ser	Cys	Thr	Pro	Arg	Ser	Arg	Ala	Pro	Leu
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Gln	Arg	Thr	Leu	Thr	Pro	Pro	Arg	Gly	Ala						
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<210> 5851

<211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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<210> 5852

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

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 Leu Thr Lys Gly Thr Ser Ala Ala His Leu Asn Ser Met Glu Val Thr
 35 40 45
 Thr Glu Asp Thr Ser Arg Thr Asp Ala Tyr Glu Ser Tyr Lys Lys Lys
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 Asp Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser
 65 70 75 80
 Glu Met

<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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<210> 5854

<211> 68

<212> PRT

<213> Homo sapiens

<400> 5854

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 Thr Pro Ser Gly Arg Ser Gly Pro Ala Ala Pro Trp Arg Thr Pro Ala
 35 40 45
 Arg Thr Pro Pro Arg Leu Leu Pro Thr Leu Cys Pro Val Thr Pro Val
 50 55 60
 Ser Trp Pro Leu
 65

<210> 5855

<211> 362

<212> DNA

<213> Homo sapiens

<400> 5855

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<210> 5856

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5856

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      20           25           30
Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
 35           40           45
Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
 50           55           60
His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
65           70           75           80
Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
      85           90           95
His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
100           105           110
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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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<211> 434

<212> PRT

<213> Homo sapiens

<400> 5858

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245          250          255
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275          280          285
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370          375          380
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385          390          395          400
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<210> 5859

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5859

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<210> 5860
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 5860
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 35 40 45
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 Val Arg Pro Gln Pro Ser Gly Cys Asp Ile Ile Glu Ser Ala Val Ser
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<210> 5861
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 <212> DNA
 <213> Homo sapiens

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<210> 5862
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 <212> PRT
 <213> Homo sapiens

<400> 5862

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 Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
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 Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
 85 90 95
 Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
 100 105 110
 Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
 115 120 125
 Ala Thr Arg Gln Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
 130 135 140
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 Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
 165 170 175
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 Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
 195 200 205
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 210 215 220
 Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
 225 230 235 240
 Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
 245 250 255
 Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
 260 265 270
 Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
 275 280 285
 Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
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 Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
 305 310 315 320
 Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
 325 330 335
 Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
 340 345 350
 Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg
 355 360 365
 Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu Leu


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Arg Thr Val Ser Met Leu Glu Tyr Phe Ile Asn Arg Ser Trp Glu Trp
385              390              395
Ser Thr Tyr Asn Thr Glu Met Leu Met Ser Glu Leu Ser Pro Glu Asp
      405              410              415
Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr
      420              425              430
Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
      435              440              445
Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
      450              455              460
Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
      465              470              475
Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val
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<210> 5863

<211> 438

<212> DNA

<213> Homo sapiens

<400> 5863

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<210> 5864

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5864

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Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

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 35 40 45
 Phe Val Leu Pro Thr Glu Gln Phe His Leu Gly Lys Ile Glu Glu Leu
 50 55 60
 Leu Val Glu Arg Thr Gly Ala Pro Phe Cys Ser Pro Thr Ser Ser Gly
 65 70 75 80
 Trp Arg Arg Ser Arg Ala Ser Ala Ile Ala Ala Gly Val His Pro Gln
 85 90 95
 Asp Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu
 100 105 110
 Lys Glu Ile Lys Glu Glu Leu Leu His Ser Glu Lys Leu Lys Thr Tyr
 115 120 125
 Phe Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro
 130 135 140
 Leu His Pro Ala Val Val Lys Pro His Leu Gly His Val Pro Asp Tyr
 145 150 155 160
 Leu Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg
 165 170 175
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 Asn Pro Leu Arg Ser Phe Lys His Lys Gly Lys Lys Phe Arg Pro Thr
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<210> 5867
 <211> 1882
 <212> DNA
 <213> Homo sapiens

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<210> 5868
<211> 131
<212> PRT
<213> Homo sapiens

<400> 5868
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Ile Pro Tyr Val Thr Tyr Asp Glu Asp Tyr Glu Gln Leu Val Glu Asp
50 55 60
Ile Val Arg Asp Gly Arg Leu Tyr Ala Ser Glu Asn His Gln Glu Ile
65 70 75 80
Leu Lys Asp Lys Lys Leu Ile Lys Ala Phe Phe Glu Val Leu Ala His
85 90 95
Pro Gln Asn Tyr Phe Lys Tyr Thr Glu Lys His Lys Glu Met Leu Pro
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<210> 5869
<211> 910
<212> DNA
<213> Homo sapiens

<400> 5869
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<211> 2217

<212> DNA

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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 Glu Val Ser Ala Asp Gly Val Asn Met Leu Pro Leu Ser Thr Pro Val
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Val Lys Thr Gly Val Lys Pro Asp Ala Ser Asp Gln Glu Pro Glu Gly		1245
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Leu Thr Leu Leu Val Pro Asp Ile Gln Lys Thr Ala Glu Ile Val Tyr		1260
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Ala Ala Thr Thr Ser Leu Arg Arg Ala Asn Gln Glu Lys Lys Leu Gly		1280
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Glu Tyr Ser Lys Lys Ala Ala Met Lys Pro Lys Pro Leu Ser Val Leu		1295
	1300	1305
Lys Ser Leu Glu Glu Lys Tyr Val Ala Val Met Lys Lys Leu Gln Phe		1310
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Asp Thr Phe Glu Met Val Ser Glu Asp Glu Asp Gly Lys Leu Gly Phe		1325
	1330	1335
Lys Val Asn Tyr His Tyr Met Ser Gln Val Lys Asn Ala Asn Asp Ala		1340
1345	1350	1355
Asn Ser Ala Ala Arg Ala Arg Arg Leu Ala Gln Glu Ala Val Thr Leu		1360

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 Asp Glu Glu Arg Leu Asp Ile Met Lys Val Leu Ile Thr Gly Pro Ala
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 Asp Thr Pro Tyr Ala Asn Gly Cys Phe Glu Phe Asp Val Tyr Phe Pro
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 Gln Asp Tyr Pro Ser Ser Pro Pro Leu Val Asn Leu Glu Thr Thr Gly
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 Gly His Ser Val Arg Phe Asn Pro Asn Leu Tyr Asn Asp Gly Lys Val
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 Cys Leu Ser Ile Leu Asn Thr Trp His Gly Arg Pro Glu Glu Lys Trp
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 Asn Pro Ser Pro Cys Phe Lys Glu Val Ile His Lys His Phe Tyr Leu
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 Lys Arg Val Glu Ile Met Ala Gln Cys Glu Glu Trp Ile Ala Asp Ile
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 Gln Gln Tyr Ser Ser Asp Lys Arg Val Gly Arg Thr Met Ser His His
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<210> 5877

<211> 683

<212> DNA

<213> Homo sapiens

<400> 5877

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<210> 5878

<211> 227

<212> PRT

<213> Homo sapiens

<400> 5878

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 35 40 45
 Arg Leu Arg Gly Cys Arg Asn Leu Tyr Lys Lys Asp Leu Leu Gly His
 50 55 60
 Phe Gly Cys Val Asn Ala Ile Glu Phe Ser Asn Asn Gly Gly Gln Trp
 65 70 75 80
 Leu Val Ser Gly Gly Asp Asp Arg Arg Val Leu Leu Trp His Met Glu
 85 90 95
 Gln Ala Ile His Ser Arg Val Lys Pro Ile Gln Leu Lys Gly Glu His
 100 105 110
 His Ser Asn Ile Phe Cys Leu Ala Phe Asn Ser Gly Asn Thr Lys Val
 115 120 125
 Phe Ser Gly Gly Asn Asp Glu Gln Val Ile Leu His Asp Val Glu Ser
 130 135 140
 Ser Glu Thr Leu Asp Val Phe Ala His Glu Asp Ala Val Tyr Gly Leu
 145 150 155 160
 Ser Val Ser Pro Val Asn Asp Asn Ile Phe Ala Ser Ser Ser Asp Asp
 165 170 175
 Gly Arg Val Leu Ile Trp Asp Ile Arg Glu Ser Pro His Gly Glu Pro
 180 185 190
 Phe Cys Trp Ala Asn Tyr Pro Ser Ala Phe His Ser Val Met Phe Asn
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 Gly Leu Trp
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<210> 5879

<211> 1555

<212> DNA

<213> Homo sapiens

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<210> 5880
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 5880
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 35 40 45
 Phe Tyr Asp Val Glu Ala Leu Arg Asp Tyr Leu Leu Gln Arg Glu Met
 50 55 60
 Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln
 65 70 75 80
 His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly
 85 90 95
 Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly
 100 105 110
 His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala
 115 120 125
 Val Asp Ala Gly Asp Cys Asp Ile Asn Tyr Glu Gly Leu Asp Asn Leu
 130 135 140
 Arg Thr Ser Ala Gly Trp Thr Ser Arg Thr Ser Leu Pro Cys Pro Thr
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 Leu Trp Glu Ser Thr Gly Leu Arg Ala
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<210> 5881
 <211> 327
 <212> DNA
 <213> Homo sapiens

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<210> 5882
 <211> 109
 <212> PRT

<213> Homo sapiens

<400> 5882

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Ala Lys Glu Asn Met Val Thr Phe Ser His Thr Leu Pro Arg Ala Ser
          35           40           45
Ala Pro Ser Leu Asp Asp Pro Ala Arg Arg His Met Thr Ile His Val
          50           55           60
Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
65           70           75           80
Lys Ser Leu Glu Gly Arg Gly Leu Gly Leu Pro Asp Asp Ala Ser Pro
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Gly His Leu Arg Ala Pro Ala Glu Pro Met Pro Glu Xaa
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<210> 5883

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5883

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<210> 5884

<211> 71

<212> PRT

<213> Homo sapiens

<400> 5884

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<210> 5886

<211> 265

<212> PRT

<213> Homo sapiens

<400> 5886

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 35 40 45
 Lys Ala Leu Leu Ala Ala Gly Ser Ala Ala Met Ala Leu Tyr Asn Pro
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 Tyr Arg His Asp Met Val Ala Val Leu Gly Glu Thr Thr Gly His Arg
 65 70 75 80
 Thr Leu Lys Val Leu Arg Asp Gln Met Arg Arg Asp Pro Glu Gly Ala
 85 90 95
 Gln Ile Leu Gln Glu Arg Pro Arg Ile Ser Thr Ser Thr Leu Asp Leu
 100 105 110
 Gly Lys Leu Gln Ser Leu Pro Glu Gly Ser Leu Gly Arg Glu Tyr Leu
 115 120 125
 Arg Phe Leu Asp Val Asn Arg Val Ser Pro Asp Thr Arg Ala Pro Thr
 130 135 140
 Arg Phe Val Asp Asp Glu Glu Leu Ala Tyr Val Ile Gln Arg Tyr Arg
 145 150 155 160
 Glu Val His Asp Met Leu His Thr Leu Leu Gly Met Pro Thr Asn Ile
 165 170 175
 Leu Gly Glu Ile Val Val Lys Trp Phe Glu Ala Val Gln Thr Gly Leu

180	185	190
Pro Met Cys Ile Leu Gly Ala Phe Phe Gly Pro Ile Arg Leu Gly Ala		
195	200	205
Gln Ser Leu Gln Val Leu Val Ser Glu Leu Ile Pro Trp Ala Val Gln		
210	215	220
Asn Gly Arg Arg Ala Pro Cys Val Leu Asn Leu Tyr Tyr Glu Arg Arg		
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<210> 5887

<211> 3779

<212> DNA

<213> Homo sapiens

<400> 5887

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<210> 5888

<211> 166

<212> PRT

<213> Homo sapiens

<400> 5888

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 Glu Thr Lys His Arg Val Ser Met Glu Val Ala Ala Ala Lys Gly Leu
 50 55 60
 Pro Val Leu Lys Tyr His Leu Leu Pro Arg Thr Lys Gly Phe Thr Thr
 65 70 75 80
 Ala Val Lys Cys Leu Arg Gly Thr Val Ala Ala Val Tyr Asp Val Thr

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Leu	Asn	Phe	Arg	Gly	Asn	Lys	Asn	Pro	Ser	Leu	Leu	Gly	Ile	Leu	Tyr
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Gly	Lys	Lys	Tyr	Glu	Ala	Asp	Met	Cys	Val	Arg	Arg	Phe	Pro	Leu	Glu
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Asp	Ile	Pro	Leu	Asp	Glu	Lys	Glu	Ala	Ala	Gln	Trp	Leu	His	Lys	Leu
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Tyr	Gln	Glu	Lys	Asp	Ala	Leu	Gln	Glu	Val	Lys	Thr	Leu	Asp	Gly	Met
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Phe	Pro	Gly	Glu	Gln	Phe										
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<210> 5889

<211> 2198

<212> DNA

<213> Homo sapiens

<400> 5889

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<211> 118

<212> PRT

<213> Homo sapiens

<400> 5890

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<211> 212

<212> PRT

<213> Homo sapiens

<400> 5892

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 Leu Val Met Thr Phe Leu Phe Arg Asn Gly Ser Leu Gln Glu Lys Leu
 50 55 60
 Trp Ala Ile Leu Gln Ala Thr Tyr Ile His Ser Trp Asn Leu Ala Arg
 65 70 75 80
 Phe Val Phe Thr Tyr Lys Gly Leu Arg Ala Leu Gln Ser Tyr Ile Gln
 85 90 95
 Gly Lys Thr Tyr Pro Ala His Ala Phe Leu Ala Ala Phe Leu Gly Gly
 100 105 110
 Ile Leu Val Phe Gly Glu Asn Asn Asn Ile Asn Ser Gln Ile Asn Met
 115 120 125
 Tyr Leu Leu Ser Arg Val Leu Phe Ala Leu Ser Arg Leu Ala Val Glu
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 Lys Gly Tyr Ile Pro Glu Pro Arg Trp Asp Pro Phe Pro Leu Leu Thr
 145 150 155 160
 Ala Val Val Trp Gly Leu Val Leu Trp Leu Phe Glu Tyr His Arg Ser
 165 170 175
 Thr Leu Gln Pro Ser Leu Gln Ser Ser Met Thr Tyr Leu Tyr Glu Asp
 180 185 190
 Ser Asn Val Trp His Asp Ile Ser Asp Phe Leu Val Tyr Asn Lys Ser
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<210> 5893

<211> 1389

<212> DNA

<213> Homo sapiens

<400> 5893

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<210> 5894

<211> 260

<212> PRT

<213> Homo sapiens

<400> 5894

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Tyr Cys Ser Thr Arg Ile Tyr Ala Ser Met Lys Cys Pro Asp Gln Lys
      65           70           75           80
Cys Leu Tyr Thr Cys Gln Ile Lys Asp Gly Gly Val Gln Pro Gln Phe
      85           90           95
Glu Ile Val Pro Glu Asp Asp Pro Gln Asn Ala Ile Val Ser Ser Ser
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      130           135           140
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Ser Phe Glu Ala Phe Gln Arg Gln Ile Phe Asp Glu Asp Gln Asn Asp
      195           200           205
Pro Leu Leu Pro Gly Ser Leu Asp Leu Pro Glu Leu Gln Pro Ala Ala
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<210> 5895

<211> 2748

<212> DNA

<213> Homo sapiens

<400> 5895

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420

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<212> PRT

<213> Homo sapiens

<400> 5896

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Thr	Phe	Val	Cys	Met	Ala	Leu	Ser	Leu	Thr	Leu	Cys	Phe	Val	Met	Phe
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Met	Thr	Leu	Lys	Lys	Thr	Phe	Val	Leu	Ala	Pro	Ser	Ser	Val	Leu	Arg
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Glu	Ser Thr Met Val Ala Ile	Ala Ala Cys Tyr Val Tyr Arg Lys Gln			
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<210> 5897

<211> 1930

<212> DNA

<213> Homo sapiens

<400> 5897

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<210> 5898

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5898

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Phe Tyr Val Arg Gly Asp Gly Thr Arg Val Tyr Phe Phe Thr Gln Glu		175
	180	185
Glu Leu Asp Thr Leu Phe Thr Thr Ala Gly Leu Glu Lys Val Gln Asn		190
	195	200
Leu Val Asp Arg Arg Leu Gln Val Asn Arg Gly Lys Gln Leu Thr Met		205
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<210> 5899

<211> 1589

<212> DNA

<213> Homo sapiens

<400> 5899

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<210> 5900

<211> 345

<212> PRT

<213> Homo sapiens

<400> 5900

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 Val Leu Ser His Thr Pro Asp Gly Ala Thr Gln Thr Ile Ala Trp Val
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 85 90 95
 Thr Thr Met Pro Gly Met Lys Arg Asp Cys Gly Gly Ala Ala Val
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 Leu Gly Ala Phe Arg Ala Ala Ile Lys Gln Gly Phe Lys Asp Asn Leu
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 His Ala Val Phe Cys Leu Ala Glu Asn Ser Val Gly Pro Asn Ala Thr
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 Arg Pro Asp Asp Ile His Leu Leu Tyr Ser Gly Lys Thr Val Glu Ile
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 Asn Asn Thr Asp Ala Glu Gly Arg Leu Val Leu Ala Asp Gly Val Ser
 165 170 175
 Tyr Ala Cys Lys Asp Leu Gly Ala Asp Ile Ile Leu Asp Met Ala Thr
 180 185 190
 Leu Thr Gly Ala Gln Gly Ile Ala Thr Gly Lys Tyr His Ala Ala Val

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Lys Cys Gly Asp Leu Val His Pro Leu Val Tyr Cys Pro Glu Leu His		
225	230	235
Phe Ser Glu Phe Thr Ser Ala Val Ala Asp Met Lys Asn Ser Val Ala		
245	250	255
Asp Arg Asp Asn Ser Pro Ser Ser Cys Ala Gly Leu Phe Ile Ala Ser		
260	265	270
His Ile Gly Phe Asp Trp Pro Gly Val Trp Val His Leu Asp Ile Ala		
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Ala Pro Val His Ala Gly Glu Arg Ala Thr Gly Phe Gly Val Ala Leu		
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<210> 5901

<211> 984

<212> DNA

<213> Homo sapiens

<400> 5901

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<210> 5902

<211> 328

<212> PRT

<213> Homo sapiens

<400> 5902

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			20					25					30		
Glu	Ile	Glu	Ala	Lys	Leu	Asp	Lys	Leu	Val	Lys	Leu	Cys	Ser	Gly	Met
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Val	Glu	Ala	Gly	Lys	Ala	Tyr	Val	Ser	Thr	Ser	Arg	Leu	Phe	Val	Ser
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Ala	Leu	Thr	Leu	Thr	Arg	Lys	Cys	Phe	Arg	His	Leu	Ala	Leu	Asp	Tyr
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Val	Leu	Gln	Ile	Asn	Val	Leu	Gln	Ala	Lys	Lys	Lys	Phe	Glu	Ile	Leu
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Ser	Tyr	Asp	Glu	Ser	Lys	Val	Glu	Phe	Asp	Val	Asp	Ala	Pro	Ser	Gly
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			275				280					285			
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			290			295					300				
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<210> 5903

<211> 3734

<212> DNA

<213> Homo sapiens

<400> 5903

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<210> 5904

<211> 308

<212> PRT

<213> Homo sapiens

<400> 5904

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<210> 5906

<211> 215

<212> PRT

<213> Homo sapiens

<400> 5906

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<210> 5907

<211> 1989

<212> DNA

<213> Homo sapiens

<400> 5907

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<210> 5908

<211> 454

<212> PRT

<213> Homo sapiens

<400> 5908

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Gln Ile Ala Ala Ser Ala Glu Leu Glu Ser Gly Ala Met Pro Trp Ser
          35          40          45
Leu Leu Gln His Ile Asp Glu Arg Asp Arg Ala Gly Leu Leu Pro Ala
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Leu Phe Lys Val Leu Ser Val Gly Arg Gly Gly Ser Pro Arg Leu Gln
 65          70          75          80
Pro Asp Ser Arg Ala Leu His Tyr Met Lys Lys Leu Tyr Lys Thr Tyr
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Ala Thr Lys Glu Gly Ile Pro Lys Ser Asn Arg Ser His Leu Tyr Asn
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Thr Val Arg Leu Phe Thr Pro Cys Thr Arg His Lys Gln Ala Pro Gly
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Asp Gln Val Thr Gly Ile Leu Pro Ser Val Glu Leu Leu Phe Asn Leu
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Asp Arg Ile Thr Thr Val Glu His Leu Leu Lys Ser Val Leu Leu Tyr
          145          150          155          160
Asn Ile Asn Asn Ser Val Ser Phe Ser Ser Ala Val Lys Cys Val Cys
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Asn Leu Met Ile Lys Glu Pro Lys Ser Ser Ser Arg Thr Leu Gly Arg
          180          185          190
Ala Pro Tyr Ser Phe Thr Phe Asn Ser Gln Phe Glu Phe Gly Lys Lys
          195          200          205
His Lys Trp Ile Gln Ile Asp Val Thr Ser Leu Leu Gln Pro Leu Val
          210          215          220
Ala Ser Asn Lys Arg Ser Ile His Met Ser Ile Asn Phe Thr Cys Met
          225          230          235          240
Lys Asp Gln Leu Glu His Pro Ser Ala Gln Asn Gly Leu Phe Asn Met
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Thr Leu Val Ser Pro Ser Leu Ile Leu Tyr Leu Asn Asp Thr Ser Ala
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Gln Ala Tyr His Ser Trp Tyr Ser Leu His Tyr Lys Arg Arg Pro Ser
          275          280          285
Gln Gly Pro Asp Gln Glu Arg Ser Leu Ser Ala Tyr Pro Val Gly Glu
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Glu Ala Ala Glu Asp Gly Arg Ser Ser His His Arg His Arg Gly
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Gln Glu Thr Val Ser Ser Glu Leu Lys Lys Pro Leu Gly Pro Ala Ser
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Phe Asn Leu Ser Glu Tyr Phe Arg Gln Phe Leu Leu Pro Gln Asn Glu
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Cys Glu Leu His Asp Phe Arg Leu Ser Phe Ser Gln Leu Lys Trp Asp
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Asn Trp Ile Val Ala Pro His Arg Tyr Asn Pro Arg Tyr Cys Lys Gly
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<210> 5909

<211> 4343

<212> DNA

<213> Homo sapiens

<400> 5909

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<210> 5910

<211> 899

<212> PRT

<213> Homo sapiens

<400> 5910

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Gly Ser Phe Gly Ala Val Tyr Phe Ala Thr Asn Ala His Thr Ser Glu
 35              40              45
Val Val Ala Ile Lys Lys Met Ser Tyr Ser Gly Lys Gln Thr His Glu
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Lys Trp Gln Asp Ile Leu Lys Glu Val Lys Phe Leu Arg Gln Leu Lys
 65              70              75              80
His Pro Asn Thr Ile Glu Tyr Lys Gly Cys Tyr Leu Lys Glu His Thr
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Ala Trp Leu Val Met Glu Tyr Cys Leu Gly Ser Ala Ser Asp Leu Leu
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Glu Val His Lys Lys Pro Leu Gln Glu Val Glu Ile Ala Ala Ile Thr
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His Gly Ala Leu His Gly Leu Ala Tyr Leu His Ser His Ala Leu Ile
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His Arg Asp Ile Lys Ala Gly Asn Ile Leu Leu Thr Glu Pro Gly Gln
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Val Lys Leu Ala Asp Phe Gly Ser Ala Ser Met Ala Ser Pro Ala Asn
165              170              175
Ser Phe Val Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Ile Leu Ala
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Met Asp Glu Gly Gln Tyr Asp Gly Lys Val Asp Ile Trp Ser Leu Gly
195              200              205
Ile Thr Cys Ile Glu Leu Ala Glu Arg Lys Pro Pro Leu Phe Asn Met
210              215              220
Asn Ala Met Ser Ala Leu Tyr His Ile Ala Gln Asn Asp Ser Pro Thr
225              230              235
Leu Gln Ser Asn Glu Trp Thr Asp Ser Phe Arg Arg Phe Val Asp Tyr
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Cys Leu Gln Lys Ile Pro Gln Glu Arg Pro Thr Ser Ala Glu Leu Leu
260              265              270
Arg His Asp Phe Val Arg Arg Asp Arg Pro Leu Arg Val Leu Ile Asp
275              280              285
Leu Ile Gln Arg Thr Lys Asp Ala Val Arg Glu Leu Asp Asn Leu Gln
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Tyr Arg Lys Met Lys Lys Ile Leu Phe Gln Glu Thr Arg Asn Gly Pro
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Met Ser Val Ser Thr Gly Ser Gln Ser Ser Ser Val Asn Ser Met Gln
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Glu Val Met Asp Glu Ser Ser Ser Glu Leu Val Met Met His Asp Asp
370              375              380
Glu Ser Thr Ile Asn Ser Ser Ser Ser Val Val His Lys Lys Asp His

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Glu Arg Phe Ala Thr Ile Lys Ser Ala Ser Leu Val Thr Arg Gln Ile
              435              440              445
His Glu His Glu Gln Glu Asn Glu Leu Arg Glu Gln Met Ser Gly Tyr
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Lys Arg Met Arg Arg Gln His Gln Lys Gln Leu Ile Ala Leu Glu Asn
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Leu Thr Thr Phe Leu Glu Ser Gln Lys Lys Gln Tyr Lys Ile Cys Lys
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Thr Thr Lys Asn Cys Arg Phe Phe Lys Arg Lys Ile Met Ile Lys Arg
              610              615              620
His Glu Val Glu Gln Gln Asn Ile Arg Glu Glu Leu Asn Lys Lys Arg
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Thr Arg Glu Leu Glu Tyr Arg Gln Leu His Thr Leu Gln Lys Leu Arg
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Met Asp Leu Ile Arg Leu Gln His Gln Thr Glu Leu Glu Asn Gln Leu
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Glu Tyr Asn Lys Arg Arg Glu Arg Glu Leu His Arg Lys His Val Met
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Glu Leu Arg Gln Gln Pro Lys Asn Leu Lys Ala Met Glu Met Gln Ile
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Ala Leu Lys Asn His Gln Leu Glu Val Thr Pro Lys Asn Glu His Lys
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Thr Ile Leu Lys Thr Leu Lys Asp Glu Gln Thr Arg Lys Leu Ala Ile
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Ala Leu Arg Leu Asp Glu Ala Gln Glu Ala Glu Cys Gln Ala Leu Arg
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Leu Gln Leu Gln Gln Glu Met Glu Leu Leu Asn Ala Tyr Gln Ser Lys
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Ile Lys Met Gln Thr Glu Ala Gln His Glu Arg Glu Leu Gln Lys Leu

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      850              855              860
Leu Leu Glu Arg Gln Glu Arg Glu Ile Glu Thr Phe Asp Met Glu Ser
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<210> 5911

<211> 645

<212> DNA

<213> Homo sapiens

<400> 5911

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<211> 211

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<213> Homo sapiens

<400> 5912

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Asp Leu Ile Leu Pro Asp Gly Gly Thr Pro Ala Gly Thr Ser Ser Pro
          35          40          45
Ala Ser Ser Ser Ser Leu Leu Asn Arg Leu Gln Leu Asp Asp Ile

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Tyr Gln Asp Phe Asp Trp Leu Arg Ser Lys Leu Glu Glu Ser Gln Pro		110
	115	120
Thr His Leu Ile Pro Pro Leu Pro Glu Lys Phe Val Val Lys Gly Val		125
	130	135
Val Asp Arg Phe Ser Glu Glu Phe Val Glu Thr Arg Arg Lys Ala Leu		140
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Asp Lys Phe Leu Lys Arg Ile Thr Asp His Pro Val Leu Ser Phe Asn		155
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Glu His Phe Asn Ile Phe Leu Thr Ala Lys Asp Leu Asn Ala Tyr Lys		175
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<210> 5913

<211> 2495

<212> DNA

<213> Homo sapiens

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<211> 158

<212> PRT

<213> Homo sapiens

<400> 5914

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Gly Gln Gly Phe Asp Arg His Leu Phe Ala Leu Arg His Leu Ala Ala
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Ala Xaa Gly Ile Ile Leu Pro Glu Leu Tyr Leu Asp Pro Ala Tyr Gly
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Gln Ile Asn His Asn Val Leu Ser Thr Ser Thr Leu Ser Ser Pro Ala
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Gly Tyr Ala Val His Asp Asn Trp Ile Gly Cys Asn Val Ser Ser Tyr
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<211> 457

<212> DNA

<213> Homo sapiens

<400> 5915

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<210> 5916
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 Ser Cys Glu Ile Ala Val Thr Arg Lys Val Val Gln Val Thr Arg Lys
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 Trp Ile Leu Gln Asp Lys Pro Val Phe Met Glu Glu Pro Asp Arg Lys
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 85 90 95
 Ser Lys Glu Ala Ser Ser Glu Ser Ser Gly His Lys Arg Ser Ser Ser
 100 105 110
 Trp Gly Arg Thr Tyr Ser Phe Thr Ser Ala Met Ser Arg Gly Cys Val
 115 120 125
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<211> 981

<212> PRT

<213> Homo sapiens

<400> 5918

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 Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser
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Ser Lys Ala Asn His Leu Gly Asp Ser Gly Gly Thr Pro Val Lys Thr
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Arg Arg His Ser Trp Arg Gln Gln Ile Phe Leu Arg Val Ala Thr Pro
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Phe His Leu Lys His Gln Phe Pro Ser Lys Gln Gln Pro Lys Asp Val
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Pro Tyr Lys Glu Leu Leu Lys Gln Leu Thr Ser Gln Gln His Ala Ile
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Gln Leu Gly Ala Gly Gln Leu Ser Leu Tyr Asn Ile Leu Lys Ala Tyr
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Ser Leu Leu Asp Gln Glu Val Gly Tyr Cys Gln Gly Leu Ser Phe Val
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<211> 1320

<212> DNA

<213> Homo sapiens

<400> 5919

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 5923

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<210> 5926

<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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Gln	Pro	Phe	Leu	Pro	Val	Phe	Thr	Met	Pro	Leu	Leu	Ser	Pro	Ser	Pro	35	40	45	
Ala	Pro	Pro	Pro	Ile	Ser	Pro	Val	Leu	Pro	Leu	Val	Pro	Pro	Pro	Ala	50	55	60	
Thr	Ala	Leu	Asn	Pro	Pro	Ala	Pro	Pro	Thr	Phe	His	Gln	Pro	Gln	Lys	65	70	75	80
Phe	Ala	Gly	Val	Asn	Lys	Ala	Pro	Ser	Val	Ile	Thr	His	Thr	Ala	Ser	85	90	95	
Ala	Thr	Leu	Thr	His	Asp	Ala	Pro	Ala	Thr	Thr	Phe	Ser	Gln	Ser	Gln	100	105	110	
Gly	Leu	Val	Ile	Thr	Thr	His	His	Pro	Ala	Pro	Ser	Ala	Ala	Pro	Cys	115	120	125	
Gly	Leu	Ala	Leu	Ser	Pro	Val	Thr	Arg	Pro	Pro	Gln	Pro	Arg	Leu	Thr	130	135	140	
Phe	Val	His	Pro	Lys	Pro	Val	Ser	Leu	Thr	Gly	Gly	Arg	Pro	Lys	Gln	145	150	155	160
Pro	His	Lys	Ile	Val	Pro	Ala	Pro	Lys	Pro	Glu	Pro	Val	Ser	Leu	Val	165	170	175	
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Ala	Val	Ile	Met	Thr	Ser	Gly	Pro	Leu	Lys	Arg	Glu	Gly	Met	Leu	Ala	195	200	205	
Ser	Thr	Val	Ser	Gln	Ser	Asn	Val	Val	Ile	Ala	Pro	Ala	Ala	Ile	Ala	210	215	220	
Arg	Ala	Pro	Gly	Val	Pro	Glu	Phe	His	Ser	Ser	Ile	Leu	Val	Thr	Asp	225	230	235	240
Leu	Gly	His	Gly	Thr	Ser	Ser	Pro	Pro	Ala	Pro	Val	Ser	Arg	Leu	Phe	245	250	255	
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Lys	Arg	Arg	Phe	Asn	Ile	Lys	Met	Cys	Phe	Asp	Met	Leu	Asn	Ser	Leu	
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Arg	Arg	Gln	Phe	Asp	His	Met	Lys	Asp	Met	Phe	Asp	Glu	Tyr	Val	Lys	
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Lys	Pro	Leu	Phe	Glu	Ser	Phe	Lys	Gly	Met	Val	Ser	Thr	Ser	Ser	Leu	
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Glu	Glu	Leu	His	Arg	Thr	Ala	Leu	Ser	Trp	Leu	Asp	Gln	His	Cys	Ser	
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Leu	Pro	Ile	Leu	Arg	Pro	Met	Val	Leu	Ser	Thr	Leu	Arg	Gln	Leu	Ser	
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Thr	Ser	Thr	Ser	Ile	Leu	Thr	Asp	Pro	Ala	Gln	Leu	Pro	Glu	Gln	Ala	
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<211> 1786
<212> DNA
<213> Homo sapiens
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120
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180
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420
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<210> 5928

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5928

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Leu Asp Leu Pro Ser Leu Thr Ser Leu Leu Ser Glu Lys Ala Lys Glu
      35           40           45
Phe Leu Met Glu Asn Arg Val Gln Ser Phe Tyr Gln Gln Glu Leu Glu
      50           55           60
Met Val Glu Ser Leu Leu Ser Leu Ala Asn Gln Pro Val Ile His Ser
      65           70           75           80
Ala Cys Ser Asp Gln Val Asn Phe Lys Lys Asp Thr Thr Ser Lys Ala
      85           90           95
Ile His Ser Ile Phe Lys Asn Ala Ile Gln Leu Leu Gln Glu Lys Gly
      100          105          110
Leu Val Phe Gln Lys Asp Asp Gly Phe Asp Asn Leu Tyr Tyr Val Thr
      115          120          125
Arg Glu Asp Lys Asp Leu His Arg Lys Ile His Arg Ile Ile Gln Gln
      130          135          140
Asp Cys Gln Lys Pro Asn His Met Glu Lys Gly Cys His Phe Leu His
      145          150          155          160
Ile Leu Ala Cys Ala Arg Leu Ser Ile Arg Pro Gly Leu Ser Glu Ala
      165          170          175
Val Leu Gln Gln Val Leu Glu Leu Leu Glu Asp Gln Ser Asp Ile Val
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Ser Thr Met Glu His Tyr Tyr Thr Ala Phe
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<210> 5929

<211> 606

<212> DNA

<213> Homo sapiens

<400> 5929

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<210> 5930
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 <212> PRT
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 35 40 45
 Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys
 50 55 60
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr
 65 70 75 80
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn
 85 90 95
 Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile
 100 105 110
 Gly Ser His Pro Val Pro Gln Pro Leu Gln Ser Phe Asp Ser Phe Arg
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 Gly Ala His His His His His His His Pro His Pro His His Ala
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<210> 5931
 <211> 478
 <212> DNA
 <213> Homo sapiens

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<210> 5932
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 5932

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 35 40 45
 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln
 50 55 60
 Glu Val Met Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys
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<210> 5933

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 5933

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<210> 5934

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5934

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Ser	Lys	Val	Arg	Glu	Gln	Leu	Glu	Gln	Glu	Leu	Glu	Glu	Leu	Thr	Ala
		35				40						45			
Ser	Leu	Phe	Glu	Glu	Ala	His	Lys	Met	Val	Arg	Glu	Ala	Asn	Met	Lys
		50				55				60					
Gln	Ala	Ala	Ser	Glu	Lys	Gln	Leu	Lys	Glu	Ala	Arg	Gly	Lys	Ile	Asp
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Met	Leu	Gln	Ala	Glu	Val	Thr	Ala	Leu	Lys	Thr	Leu	Val	Ile	Thr	Ser
				85				90						95	
Thr	Pro	Ala	Ser	Pro	Asn	Arg	Glu	Leu	His	Pro	Gln	Leu	Leu	Ser	Pro

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Thr	Lys	Ala	Gly	Pro	Arg	Lys	Gly	His	Ser	Arg	His	Lys	Ser	Thr	Ser
	115		120		125										
Ser	Thr	Leu	Cys	Pro	Ala	Val	Cys	Pro	Ala	Ala	Gly	His	Thr	Leu	Thr
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Pro	Asp	Arg	Glu	Gly	Lys	Glu	Val	Asp	Thr	Ile	Leu	Phe	Ala	Glu	Phe
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Gln	Ala	Trp	Arg	Glu	Ser	Pro	Thr	Leu	Asp	Lys	Thr	Cys	Pro	Phe	Leu
	165		170		175										
Glu	Arg	Val	Tyr	Arg	Glu	Asp	Val	Gly	Pro	Cys	Leu	Asp	Phe	Thr	Met
	180		185		190										
Gln	Glu	Leu	Ser	Val	Leu	Val	Arg	Ala	Ala	Val	Glu	Asp	Asn	Thr	Leu
	195		200		205										
Thr	Ile	Glu	Pro	Val	Ala	Ser	Gln	Thr	Leu	Pro	Thr	Val	Lys	Val	Ala
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Arg	Thr	Cys	Arg	His	Arg	Ile	Arg	Leu	Gly	Asp	Ser	Lys	Ser	His	Tyr
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Tyr	Ile	Ser	Pro	Ser	Ser	Arg	Ala	Arg	Ile	Thr	Ala	Val	Cys	Asn	Phe
	260		265		270										
Phe	Thr	Tyr	Ile	Arg	Tyr	Ile	Gln	Gln	Gly	Leu	Val	Arg	Gln	Asp	Ala
	275		280		285										
Glu	Pro	Met	Phe	Trp	Glu	Ile	Met	Arg	Leu	Arg	Lys	Glu	Met	Ser	Leu
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Ala	Lys	Leu	Gly	Phe	Phe	Pro	Gln	Glu	Ala						
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<210> 5935

<211> 2727

<212> DNA

<213> Homo sapiens

<400> 5935

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<210> 5936

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5936

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His	Glu	Ser	Gln	Ser	Asp	Arg	Ala	Ser	Phe	Gly	Glu	Gly	Thr	Glu	Pro
			20					25					30		
Asp	Gln	Glu	Pro	Pro	Pro	Pro	Tyr	Gln	Glu	Gln	Val	Pro	Val	Pro	Val
		35					40				45				
Tyr	His	Pro	Thr	Pro	Ser	Gln	Thr	Arg	Leu	Ala	Thr	Gln	Leu	Thr	Glu
	50					55					60				
Glu	Glu	Gln	Ile	Arg	Ile	Ala	Gln	Arg	Ile	Gly	Leu	Ile	Gln	His	Leu
65				70					75					80	
Pro	Lys	Gly	Val	Tyr	Asp	Pro	Gly	Arg	Asp	Gly	Ser	Glu	Lys	Lys	Ile
			85						90				95		
Arg	Glu	Cys	Val	Ile	Cys	Met	Met	Asp	Phe	Val	Tyr	Gly	Asp	Pro	Ile
			100					105					110		
Arg	Phe	Leu	Pro	Cys	Met	His	Ile	Tyr	His	Leu	Asp	Cys	Ile	Asp	Asp
			115				120					125			
Trp	Leu	Met	Arg	Ser	Phe	Thr	Cys	Pro	Ser	Cys	Met	Glu	Pro	Val	Asp
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Ala	Ala	Leu	Leu	Ser	Ser	Tyr	Glu	Thr	Asn						
145						150									

<210> 5937

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 5937

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<210> 5938

<211> 406

<212> PRT

<213> Homo sapiens

<400> 5938

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Ala Phe Leu Leu Thr Ile Pro Glu Asn Ala Glu Gly His Ile Ile Leu
 20          25          30
Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
 35          40          45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
 50          55          60
Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
 65          70          75          80
Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
 85          90          95
Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
100          105          110
Leu Asn Leu Gly Arg Gln Leu Ile Ser Asp His Val Asp Leu Val Leu
115          120          125
Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
130          135          140
Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
145          150          155          160
Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
165          170          175
Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
180          185          190
Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
195          200          205
Leu Leu Leu Cys Asn Arg Asn Asp Thr Ala Trp Asp Glu Leu Lys Leu
210          215          220
Thr Cys Gln Thr Ala Leu His Val Leu Gln Leu Thr Leu Lys Glu Pro
225          230          235          240
Trp Ala Leu Leu Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr
245          250          255
Ile Arg His Lys Thr His Asn Asp Pro Glu Ser Ile Leu Lys Asp Asp
260          265          270
Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser
275          280          285
Ala Leu Glu Ser Val Val Gly Ser Leu Glu His Asp Gly Gly Glu Ile
290          295          300
Leu Thr Asp Met Lys Tyr Gly His Leu Trp Ser Val Gln Ala Asp Ser
305          310          315          320
Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
325          330          335
Leu Tyr Asn Ser Gln Glu Glu Leu Asn Trp Ser Phe Leu Arg Ser Thr
340          345          350
Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
355          360          365
Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
370          375          380
Leu Gln Val Ala Val Glu Thr Ala Asn Leu Ile Leu Asp Leu Ser Tyr
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Val Ile Glu Asp Lys Asn

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405

<210> 5939

<211> 795

<212> DNA

<213> Homo sapiens

<400> 5939

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360
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<210> 5940

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5940

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Cys Lys Arg Lys Glu Gln Glu Lys Glu Arg Ala Leu Gln Pro
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Lys Lys Gln Arg Leu Val Phe Thr Asp Leu Gln Arg Arg Thr Leu Ile
20          25          30
Ala Ile Phe Lys Glu Asn Lys Arg Pro Ser Lys Glu Met Gln Val Thr
35          40          45
Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe
50          55          60
Met Asn Ala Arg Arg Cys Met Asn Arg Trp Ala Glu Glu Pro Ser
65          70          75          80
Thr Ala Pro Gly Gly Pro Ala Gly Ala Thr Ala Thr Phe Ser Lys Ala

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85

90

95

<210> 5941

<211> 2590

<212> DNA

<213> Homo sapiens

<400> 5941

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120
gcttaagcata gcacatcaga gcataacaca gtgtgagggg aataaagtgt acaatgacat
180
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420
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1380

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<210> 5942

<211> 89

<212> PRT

<213> Homo sapiens

<400> 5942

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 Arg Gln Ser Leu Ala Leu Leu Xaa Gln Val Gly Val Gln Trp His Asp
 20 25 30
 Pro Gly Ser Leu Gln Pro Pro Pro Gly Phe Lys Gln Phe Ser Cys

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          35              40              45
Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Leu Ser Ser Arg Leu
   50              55              60
Ala Thr Phe Cys Ile Phe Ser Arg Asp Arg Val Ser Pro Cys Trp Pro
65              70              75              80
Gly Trp Ser Gln Thr Pro Asp Leu Lys
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<210> 5943

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5943

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660
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<210> 5944

<211> 174

<212> PRT

<213> Homo sapiens

<400> 5944

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Gly Gln Leu Val Val Ile Gly Lys Asp Glu Ser Tyr Ser Lys Thr Ser
20              25              30
Gly Val Ser Ser Ile Thr Lys Leu Gln Arg Gln Pro Phe Gly Val Glu

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<210> 5946

<211> 121

<212> PRT

<213> Homo sapiens

<400> 5946

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Glu Val Ile Ser Ala Gly Pro Cys Glu Lys Ile His Asp Glu Asn Leu
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Arg Lys Gln Tyr Glu Lys Ser Ser Arg Phe Met Lys Val Gly Tyr Glu
                20             25             30
Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val Glu Arg
                35             40             45
Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln
                50             55             60
Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln
 65             70             75             80
Val Leu Thr Asp Lys Ile Asp Val Leu Gln Gln Ile Glu Glu Leu
                85             90             95
Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys Leu Val
                100            105            110
Glu Gln Leu Lys Glu Glu Arg Glu Leu
                115            120

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<210> 5947

<211> 2283

<212> DNA

<213> Homo sapiens

<400> 5947

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 420
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<210> 5948

<211> 76

<212> PRT

<213> Homo sapiens

<400> 5948

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<210> 5949

<211> 4706

<212> DNA

<213> Homo sapiens

<400> 5949

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<210> 5950

<211> 397

<212> PRT

<213> Homo sapiens

<400> 5950

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			20					25					30		
His	Ala	Met	Lys	Gly	Val	Ile	Arg	Val	Lys	Phe	Val	Asn	Asp	Leu	Gly
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Val	Asp	Glu	Ala	Gly	Ile	Asp	Gln	Asp	Gly	Val	Phe	Lys	Glu	Phe	Leu
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Glu	Glu	Ile	Ile	Lys	Arg	Val	Phe	Asp	Pro	Ala	Leu	Asn	Leu	Phe	Lys
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Thr	Thr	Ser	Gly	Asp	Glu	Arg	Leu	Tyr	Pro	Ser	Pro	Thr	Ser	Tyr	Ile
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His	Glu	Asn	Tyr	Leu	Gln	Leu	Phe	Glu	Phe	Val	Gly	Lys	Met	Leu	Gly
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Lys	Ala	Val	Tyr	Glu	Gly	Ile	Val	Val	Asp	Val	Pro	Phe	Ala	Ser	Phe
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Phe	Leu	Ser	Gln	Leu	Leu	Gly	His	His	His	Ser	Val	Phe	Tyr	Ser	Ser
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Ser	Ile	Lys	Arg	Tyr	Asp	Gly	Asp	Ile	Thr	Asp	Leu	Gly	Leu	Thr	Leu
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Ser	Tyr	Asp	Glu	Asp	Val	Met	Gly	Gln	Leu	Val	Cys	His	Glu	Leu	Ile
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Ile Arg Met Phe Ser Thr Pro Glu Leu Gln Arg Leu Ile Ser Gly Asp
      245              250              255
Asn Ala Glu Ile Asp Leu Glu Asp Leu Lys Lys His Thr Val Tyr Tyr
      260              265              270
Gly Gly Phe His Gly Ser His Arg Val Ile Ile Trp Leu Trp Asp Ile
      275              280              285
Leu Ala Ser Asp Phe Thr Pro Asp Glu Arg Ala Met Phe Leu Lys Phe
      290              295              300
Val Thr Ser Cys Ser Arg Pro Pro Leu Leu Gly Phe Ala Tyr Leu Lys
      305              310              315              320
Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr
      325              330              335
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys
      340              345              350
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu
      355              360              365
Leu Lys Leu Pro Asn Tyr Ser Lys Lys Ser Val Leu Arg Glu Lys Leu
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<210> 5951

<211> 1724

<212> DNA

<213> Homo sapiens

<400> 5951

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720

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<211> 378

<212> PRT

<213> Homo sapiens

<400> 5952

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 Leu Lys Glu Tyr Arg Ile Cys Met Pro Leu Thr Val Asp Glu Tyr Lys
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 Ile Gly Gln Leu Tyr Met Ile Ser Lys His Ser His Glu Gln Ser Asp
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 His His Gly Asn Gly Gln Phe Thr Glu Lys Arg Val Tyr Leu Asn Ser

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Lys Leu Pro Ser Trp Ala Arg Ala Val Val Pro Lys Ile Phe Tyr Val
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Cys Ser Phe Leu Pro Lys Phe Ser Ile His Ile Glu Thr Lys Tyr Glu
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Asp Asn Lys Gly Ser Asn Asp Thr Ile Phe Asp Asn Glu Ala Lys Asp
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Val Glu Arg Glu Val Cys Phe Ile Asp Ile Ala Cys Asp Glu Ile Pro
      180              185              190
Glu Arg Tyr Tyr Lys Glu Ser Glu Asp Pro Lys His Phe Lys Ser Glu
      195              200              205
Lys Thr Gly Arg Gly Gln Leu Arg Glu Gly Trp Arg Asp Ser His Gln
      210              215              220
Pro Ile Met Cys Ser Tyr Lys Leu Val Thr Val Lys Phe Glu Val Trp
      225              230              235              240
Gly Leu Gln Thr Arg Val Glu Gln Phe Val His Lys Val Val Arg Asp
      245              250              255
Ile Leu Leu Ile Gly His Arg Gln Ala Phe Ala Trp Val Asp Glu Trp
      260              265              270
Tyr Asp Met Thr Met Asp Glu Val Arg Glu Phe Glu Arg Ala Thr Gln
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Glu Ala Thr Asn Lys Lys Ile Gly Ile Phe Pro Pro Ala Ile Ser Ile
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      305              310              315              320
Ala Pro Ser Thr Pro Leu Ser Thr Asp Ala Pro Glu Phe Leu Ser Val
      325              330              335
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<210> 5953

<211> 777

<212> DNA

<213> Homo sapiens

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<211> 152

<212> PRT

<213> Homo sapiens

<400> 5954

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<210> 5955

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5955

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 120
 gctcagcctg tgatctgtat ccactcagca tgcacttggg cagatgattt gtctgtgtgc
 180

tacccttccc cccatattac catacatatg caccgaggga ccagcagcga cggtagcagc
 240
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 300
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 360
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 660
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 720
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 780
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 1320
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<210> 5956

<211> 431

<212> PRT

<213> Homo sapiens

<400> 5956

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Arg	Phe	Lys	Ala	Leu	Pro	Pro	Gly	Ala	Gln	Pro	Val	Ile	Cys	Ile	His								
		35					40					45											
Ser	Ala	Cys	Thr	Trp	Ala	Asp	Asp	Leu	Ser	Val	Cys	Tyr	Pro	Ser	Pro								
	50					55					60												
His	Ile	Thr	Ile	His	Met	His	Gly	Gly	Thr	Ser	Ser	Asp	Gly	Ser	Ser								
65					70					75													
Ser	Met	Ala	Ala	Ile	Tyr	Gly	Gly	Val	Glu	Gly	Gly	Gly	Thr	Arg	Ser								
				85					90					95									
Glu	Val	Leu	Leu	Val	Ser	Glu	Asp	Gly	Lys	Ile	Leu	Ala	Glu	Ala	Asp								
			100					105					110										
Gly	Leu	Ser	Thr	Asn	His	Trp	Leu	Ile	Gly	Thr	Asp	Lys	Cys	Val	Glu								
		115					120					125											
Arg	Ile	Asn	Glu	Met	Val	Asn	Arg	Ala	Lys	Arg	Lys	Ala	Gly	Val	Asp								
						135					140												
Pro	Leu	Val	Pro	Leu	Arg	Ser	Leu	Gly	Leu	Ser	Leu	Ser	Gly	Gly	Asp								
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Gln	Glu	Asp	Ala	Gly	Arg	Ile	Leu	Ile	Glu	Glu	Leu	Arg	Asp	Arg	Phe								
				165					170					175									
Pro	Tyr	Leu	Ser	Glu	Ser	Tyr	Leu	Ile	Thr	Thr	Asp	Ala	Ala	Gly	Ser								
				180					185					190									
Ile	Ala	Thr	Ala	Thr	Pro	Asp	Gly	Gly	Val	Val	Leu	Ile	Ser	Gly	Thr								
		195					200					205											
Gly	Ser	Asn	Cys	Arg	Leu	Ile	Asn	Pro	Asp	Gly	Ser	Glu	Ser	Gly	Cys								
		210				215					220												
Gly	Gly	Trp	Gly	His	Met	Met	Gly	Asp	Glu	Gly	Ser	Ala	Leu	Ser	Ala								
225					230					235				240									
Pro	Ser	Ala	Tyr	Trp	Ile	Ala	His	Gln	Ala	Val	Lys	Ile	Val	Phe	Asp								
				245					250					255									
Ser	Ile	Asp	Asn	Leu	Glu	Ala	Ala	Pro	His	Asp	Ile	Gly	Tyr	Val	Lys								
			260					265					270										
Gln	Ala	Met	Phe	His	Tyr	Phe	Gln	Val	Pro	Asp	Arg	Leu	Gly	Ile	Leu								
		275					280					285											
Thr	His	Leu	Tyr	Arg	Asp	Phe	Asp	Lys	Cys	Arg	Phe	Ala	Gly	Phe	Cys								

<210> 5957

<211> 855

<212> DNA

<213> Homo sapiens

<400> 5957

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 120
 ctaaacagggt accgccaggc tggaagcagt gggccaggga attctcagaa cagctttcta
 180
 gttcaagagg tgatggaaga agagtggaat gctttgcagt cagtggagaa ttgtccagaa
 240
 gacttggtc agctggagga gctgatagac atggctgtgc tggaggaaat tcaacaggag
 300
 ctgatcaacc aaggcctgtg atacttgggc tgtgatcctc tagagccagc ttggactcac
 360
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 420
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 480
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 540
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 720
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<210> 5958

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5958

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Gly	Ser	Pro	Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg	Cys	Leu	Glu	Arg
			20				25					30			
Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr	Arg	Gln	Ala	Gly
			35				40				45				
Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu	Val	Gln	Glu	Val
		50			55					60					
Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu	Asn	Cys	Pro	Glu
65				70				75					80		
Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu
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Ile	Gln	Gln	Glu	Leu	Ile	Asn	Gln	Gly	Leu						

100

<210> 5959
 <211> 830
 <212> DNA
 <213> Homo sapiens

105

<400> 5959
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 120
 ctatatgatg acaatctctt ctgtcatttg gtggatgaag tactcttggt tgaaaggag
 180
 ctacacagtg ttcattgcta tcctggcact tttgctaatt gtatgcatat tctatcagag
 240
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 300
 tcaatgcttt cctcagaagc tgcctgggta tcgcaatata aggatatcac tgacgtggat
 360
 gaaatgaaag ttccagattg tgcagaaact tttatgactc tactcttggt tataactgac
 420
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 480
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 540
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 600
 gattgggctg acaatgtttt ctttctacaa cttcaacagg ctgcactgga ggtgtttgca
 660
 gagaataata ctctgagtaa attgcagcta ggacagctag cctctatgga gagctctgtc
 720
 tttgatgaca tgattaacct cttagaacgt ttaaagcatg atatgttgac ccgtcaagta
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 830

<210> 5960
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 5960
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 Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn
 35 40 45
 Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr
 50 55 60
 Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser
 65 70 75 80
 Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

				85					90					95	
Met	Lys	Val	Pro	Asp	Cys	Ala	Glu	Thr	Phe	Met	Thr	Leu	Leu	Val	
				100					105					110	
Ile	Thr	Asp	Arg	Tyr	Lys	Asn	Leu	Pro	Thr	Ala	Ser	Arg	Lys	Leu	Gln
				115					120				125		
Phe	Leu	Glu	Leu	Gln	Lys	Asp	Leu	Val	Asp	Asp	Phe	Arg	Ile	Arg	Leu
				130								140			
Thr	Gln	Val	Met	Lys	Glu	Glu	Thr	Arg	Ala	Ser	Leu	Gly	Phe	Arg	Tyr
					150						155				160
Cys	Ala	Ile	Leu	Asn	Ala	Val	Asn	Tyr	Ile	Ser	Thr	Val	Leu	Ala	Asp
				165						170					175
Trp	Ala	Asp	Asn	Val	Phe	Phe	Leu	Gln	Leu	Gln	Gln	Ala	Ala	Leu	Glu
				180						185				190	
Val	Phe	Ala	Glu	Asn	Asn	Thr	Leu	Ser	Lys	Leu	Gln	Leu	Gly	Gln	Leu
				195					200				205		
Ala	Ser	Met	Glu	Ser	Ser	Val	Phe	Asp	Asp	Met	Ile	Asn	Leu	Leu	Glu
						215						220			
Arg	Leu	Lys	His	Asp	Met	Leu	Thr	Arg	Gln	Val	Asp	His	Val	Phe	Arg
					230						235				240
Glu	Val	Lys	Asp	Ala	Ala	Lys	Leu	Tyr	Lys	Lys					
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<210> 5961

<211> 585

<212> DNA

<213> Homo sapiens

<400> 5961

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120					
aattagagac	tgagacaggg	caggggtgcc	aggtgtctgc	atgcgtttca	tgtggatgcc
180					
ctgtgtctatt	ctggcctgct	cctggggccc	ctcccactc	agccctggct	gatgagaatg
240					
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300					
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360					
cacacctatg	tgactcccg	atgttttgtt	ccttatgtgt	cccatgcatg	ctcccactc
420					
gacctgcgt	gtctcgcgt	gtctgtgtgc	ggccagtcct	gccttcactc	tctcatgggt
480					
ggccctggca	gcattgtctg	ctccccagca	ggtgagctca	ggagataaga	tggaagatgc
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585					

<210> 5962

<211> 114

<212> PRT

<213> Homo sapiens

<400> 5962

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      20           25           30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
      35           40           45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
      50           55           60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
      65           70           75           80
Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
      85           90           95
Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
      100           105           110
Pro Ser

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<210> 5963

<211> 1288

<212> DNA

<213> Homo sapiens

<400> 5963

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420
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780
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900

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 1020
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<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

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			20					25					30		
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val
			35				40					45			
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
	50				55					60					
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
	65				70				75					80	
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
			85						90					95	
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
			100					105					110		
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
			115				120					125			
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
	130				135							140			
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
	145				150				155					160	
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165					170						175	
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
			180				185						190		
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
			195				200						205		
Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
	210						215						220		

<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

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 120
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 180
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 240
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 300
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 360
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 480
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 720
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 780
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 840
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 900
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<210> 5966
 <211> 233
 <212> PRT
 <213> Homo sapiens

<400> 5966
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 35 40 45
 Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly
 50 55 60
 Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu
 65 70 75 80
 Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

	85		90		95
Ala	Gln	Leu	Glu	Glu	Leu
	100		105		110
Gln	Glu	Leu	Ile	Asn	Gln
	115		120		125
Ser	Leu	Gln	Phe	Asp	Glu
	130		135		140
Glu	Ala	Asn	Pro	Leu	Ile
	145		150		155
Ile	Thr	Ser	Gly	Val	Val
	165		170		175
His	Ser	Ser	Glu	Leu	Thr
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Ser	Ile	Asn	Glu	His	Ser
	195		200		205
Val	Thr	Gly	Gly	Thr	Glu
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<210> 5967

<211> 1806

<212> DNA

<213> Homo sapiens

<400> 5967

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120
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180
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240
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300
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360
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420
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540
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600
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660
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720
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780
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840

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 1080
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 1140
 catcttgcac actggaagag agtgggaagg gctttgaatc ttttgcatgg tacgtgggaa
 1200
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 1260
 atctgtacag aaacagcaga ccgagagctg cttccatctt tccatgaagt ctgagtttac
 1320
 ccaaagaagg agcttccctt ctttattctc tttactgctg gattatgttc cttcacagcc
 1380
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 1440
 agtgtttgcc tagagggagg ccttggggaa tggatgggga aagccaaggc cataaaagca
 1500
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 1560
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 1620
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 1680
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 1806

<210> 5968

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5968

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 Gly Thr Ser Ser Leu Ile Ser Gly Leu Ile Leu Ile Phe Glu Trp Trp
 35 40 45
 Tyr Phe Arg Lys Tyr Gly Thr Ser Phe Ile Glu Gln Val Ser Val Ser
 50 55 60
 His Leu Arg Pro Leu Leu Gly Gly Val Asp Asn Asn Ser Ser Asn Asn
 65 70 75 80
 Ser Asn Ser Ser Asn Gly Asp Ser Asp Ser Asn Arg Gln Ser Val Ser
 85 90 95
 Glu Cys Lys Val Trp Arg Asn Pro Leu Asn Leu Phe Arg Gly Ala Glu

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      100              105              110
Tyr Asn Arg Tyr Thr Trp Val Thr Gly Arg Glu Pro Leu Thr Tyr Tyr
      115              120              125
Asp Met Asn Leu Ser Ala Gln Asp His Gln Thr Phe Phe Thr Cys Asp
      130              135              140
Ser Asp His Leu Arg Pro Ala Asp Ala Ile Met Gln Lys Ala Trp Arg
      145              150              155              160
Glu Arg Asn Pro Gln Ala Arg Ile Ser Ala Ala His Glu Ala Leu Glu
      165              170              175
Ile Asn Glu Thr Arg His Gln Cys Leu Gly Val His Gln Lys Lys Ala
      180              185
Ser Asn Val Cys Gln Lys Thr Arg Glu Asp Gln Gly Ser Lys Ala Leu
      195              200              205
Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala Lys Tyr
      210              215              220
Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala
      225              230              235              240
Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Pro Glu Ala Ala
      245              250              255
Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile
      260              265              270
His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu
      275              280              285
Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp
      290              295              300
Ser Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg
      305              310              315              320
Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe
      325              330              335
Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr
      340              345              350
Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His
      355              360              365
Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe
      370              375              380
Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His
      385              390              395              400
Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Val Ser Val Cys
      405              410              415
Leu Glu Gly Gly Leu Gly Glu Trp Met Gly Lys Ala Lys Gly Ile Lys
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Ala Ala

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<210> 5969

<211> 429

<212> DNA

<213> Homo sapiens

<400> 5969

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ctgggcgggcg gggaagggt cccggatctg cagcctgggg tcttgccag ccaggccatg
120

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attgagaaga tcctgagcga ggacccccgg tggcaagatg ccaacttcgt gctgggcagc
 180
 tacaagacgg agcagtgccc gaagccgcca cgccctgtgcc gccagggcta tgcgtgcccc
 240
 cactaccaca atagccggga caggcggcgc aacccccggc ggttcacgta caggtccacg
 300
 ccctgcccc gctgaagca cggggatgag tggggggaac cctcacgctg cgatggcggc
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<210> 5970

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5970

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Gln	Asn	Gly	Gln	Leu	Gly	Gly	Gly	Glu	Gly	Val	Pro	Asp	Leu	Gln	Pro
		20					25					30			
Gly	Val	Leu	Ala	Ser	Gln	Ala	Met	Ile	Glu	Lys	Ile	Leu	Ser	Glu	Asp
		35				40				45					
Pro	Arg	Trp	Gln	Asp	Ala	Asn	Phe	Val	Leu	Gly	Ser	Tyr	Lys	Thr	Glu
	50				55					60					
Gln	Cys	Pro	Lys	Pro	Pro	Arg	Leu	Cys	Arg	Gln	Gly	Tyr	Ala	Cys	Pro
65				70					75					80	
His	Tyr	His	Asn	Ser	Arg	Asp	Arg	Arg	Arg	Asn	Pro	Arg	Arg	Phe	Gln
			85					90					95		
Tyr	Arg	Ser	Thr	Pro	Cys	Pro	Ser	Val	Lys	His	Gly	Asp	Glu	Trp	Gly
		100					105					110			
Glu	Pro	Ser	Arg	Cys	Asp	Gly	Gly	Asp	Gly	Cys	Gln	Tyr	Cys	His	Ser
	115				120						125				
Arg	Thr	Glu	Gln	Gln	Phe	His	Pro	Glu	Ile	Tyr	Lys	Ser	Thr	Lys	
	130				135						140				

<210> 5971

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5971

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 120
 catgtccctt aggtcagcta agcccacatc agtgtccaaa taggcaacat ccctatttta
 180
 tagatggta tccccatttt agagatagct cccttttata tccccatttt acaggtgaag
 240
 gaattgaggc acagaagggt aggtcacttc tgcaagatga ccagctgaac caaaatttca
 300

gggtttcaaa caccaaatgt gttcctttgt cttccgtttc ccacttgctt cccagaggct
 360
 cagcaagtag cctctggcca ctgagcatcc tcccggccac ttgtctccct gcctctcatg
 420
 cccaggactg tggccgtgga tgccagagcg aggatgtgaa tcctgttggg ttctgaagcc
 480
 cacacctacc ctcagccttg aagctgcagc aatggctgct tcagatgag cacacctctg
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 565

<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

Met	His	Arg	Ala	Leu	Ser	Cys	Pro	Leu	Gly	Gln	Leu	Ser	Pro	His	Gln
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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
			20					25				30			
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
		35				40					45				
Ala	Gln	Lys	Val	Arg	Ser	Leu	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn
	50				55				60						
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65				70				75						80	
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
			85					90						95	
Pro	Pro	Thr	Leu	Leu	Pro	Ala	Ser								
							100								

<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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 120
 aacgagcctt cgaatcatgg acgcgcgggc ccagctcctc ctccagagttc ctcacccggg
 180
 gccgtcactc acatccgggg cctcactca catccgggac cctcatccgg ggctctcacc
 240
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 300
 actccgtcgc cggaagtgcc accgagaagc gccggcctcg gggctgtcta cagcgccccc
 360
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 420
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 480